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PHARMACOPŒIA

OF THE

UNITED STATES.



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THE
PHARMACOPŒIA

OF THE

UNITED STATES OF AMERICA.

FOURTH DECENNIAL REVISION.

BY AUTHORITY OF

THE NATIONAL CONVENTION FOR REVISING THE PHARMACOPŒIA,

HELD AT WASHINGTON, A. D. 1860.

PHILADELPHIA:
J. B. LIPPINCOTT & CO.
1864.

Entered according to Act of Congress, in the year 1863, by
FRANKLIN BACHE, M.D.,
CHAIRMAN OF THE COMMITTEE OF REVISION AND PUBLICATION,
in the Office of the Clerk of the District Court for the Eastern District of
Pennsylvania.

PROCEEDINGS
OF THE
NATIONAL CONVENTION OF 1860
FOR REVISING THE PHARMACOPŒIA.
FOURTH DECENNIAL REVISION.

THE Convention for the fourth decennial revision of the Pharmacopœia of the United States met at Washington on Wednesday, May 2d, 1860, present the following delegates at its several sessions:

A. I. FULLER, M. D., and HENRY T. CUMMINGS, M. D.,
from the Maine Medical Association;

JACOB BIGELOW, M. D., and EPHRAIM CUTTER, M. D.,
from the Massachusetts Medical Society;

MESSRS. CHARLES T. CARNEY and ROBERT R. KENT,
from the Massachusetts College of Pharmacy;

GUERDON W. RUSSEL, M. D., from the Connecticut State
Medical Society;

CALEB GREEN, M. D., from the New York State Medi-
cal Society;

EDWARD R. SQUIBB, M.D., from the New York State Medical Society, and the New York Academy of Medicine;

MESSRS. JOHN MEAKIM, WILLIAM HEGEMAN, and ALEXANDER CUSHMAN, from the New York College of Pharmacy;

JOSEPH CARSON, M.D., from the University of Pennsylvania;

FRANKLIN BACHE, M.D., from the Jefferson Medical College of Philadelphia;

GEORGE B. WOOD, M.D., and ROBERT BRIDGES, M.D., from the College of Physicians of Philadelphia;

MESSRS. WILLIAM PROCTER, Jr., ALFRED B. TAYLOR, and EDWARD PARRISH, from the Philadelphia College of Pharmacy;

HENRY F. ASKEW, M.D., from the Delaware State Medical Society;

WILLIAM E. A. AIKEN, M.D., from the University of Maryland;

MESSRS. ALPHEUS P. SHARP and GEORGE W. ANDREWS, from the Maryland College of Pharmacy;

JOHN C. RILEY, M.D., and N. S. LINCOLN, M.D., from the National Medical College of Washington;

THOMAS MILLER, M.D., JOSHUA RILEY, M.D., and WILLIAM P. YOUNG, M.D., from the Medical Society of the District of Columbia;

LEWIS A. EDWARDS, M.D., from the United States Army; and

GEORGE CLYMER, M.D., from the United States Navy.

The Convention was organized by the appointment of the following officers :

PRESIDENT.

GEORGE B. WOOD, M.D., of Pennsylvania.

FIRST VICE-PRESIDENT.

JACOB BIGELOW, M.D., of Massachusetts.

SECOND VICE-PRESIDENT.

EDWARD WARREN, M.D., of North Carolina.

SECRETARY.

THOMAS MILLER, M.D., of the District of Columbia.

ASSISTANT SECRETARY.

JOHN C. RILEY, M.D., of the District of Columbia.

The Convention, by resolution, extended an invitation to those members of Congress who are graduates of medicine to attend its sessions, and take part in its deliberations.

Dr. Wood, as Chairman of the Committee of Revision and Publication of the Pharmacopœia of 1850, presented a report, made up to the time of its publication in 1851; also a supplementary report in relation to the reprint of the same work, which was called for in 1855. These reports were accompanied by his accounts, which were referred to an auditing Committee, and subsequently reported on as correct.

The delegates from the several medical and pharmaceutical bodies, represented in the Convention, were then called upon for contributions in aid of the revision of the Pharmacopœia; when communications were presented by Drs. Bigelow and Cutter from the Massachusetts Medical

Society; by Dr. Squibb from the New York State Medical Society and the New York Academy of Medicine; by Mr. Hegeman from the New York College of Pharmacy; by Dr. Bridges from the College of Physicians of Philadelphia; and by Mr. Procter from the Philadelphia College of Pharmacy. In addition to these communications from bodies represented in the Convention, contributions towards the revision were subsequently received from Dr. Bigelow and Dr. Cutter, both of Massachusetts, from Mr. Taylor, of Pennsylvania, and from Mr. William S. Thompson, of Maryland.

Mr. Parrish presented a printed copy of the Proceedings of the American Pharmaceutical Association at its eighth annual meeting, held at Boston in September, 1859, as a contribution from that body in aid of the revision of the Pharmacopœia.

These communications were then referred to a Committee, consisting of Dr. Bache, Mr. Parrish, Mr. Sharp, Dr. Miller, and Dr. Russel, with instructions to report a plan for the revision and publication of the Pharmacopœia.

Dr. Bache, from this Committee, reported five resolutions, embodying a plan of revision and publication, which, after filling up a blank in the second resolution with the name of Philadelphia, were adopted unanimously as follows:

1. *Resolved*, That a Committee of Revision and Publication be appointed, to consist of nine members (including the President of this Convention as one), to which shall be referred all communications in relation to the revision of

the Pharmacopœia, and that three of this Committee shall form a quorum.

2. *Resolved*, That the Committee shall meet in the city of Philadelphia, and be convened as soon as practicable by the Chairman.

3. *Resolved*, That the Committee shall be authorized to publish the work after its revision, and to take all other measures that may be necessary to carry out the views and intentions of the Convention.

4. *Resolved*, That the Committee shall have power to fill its own vacancies.

5. *Resolved*, That, after the completion of its labours, the Committee shall transmit a report of its proceedings to the Secretary of this Convention, to be laid before the next Convention.

The Convention decided that the eight remaining members of the Committee of Revision and Publication should be selected by a nominating Committee, formed of one delegate from each State and District represented in the Convention, and of one from the Army and Navy respectively, to be appointed by the President, who selected the following delegates:

Dr. A. I. Fuller,	of Maine.
Dr. Jacob Bigelow,	of Massachusetts.
Dr. Guerdon W. Russel,	of Connecticut.
Mr. William Hegeman,	of New York.
Mr. Alfred B. Taylor,	of Pennsylvania.
Dr. Henry F. Askew,	of Delaware.
Mr. Alpheus P. Sharp,	of Maryland.

Dr. Joshua Riley, of the District of Columbia.

Dr. Lewis A. Edwards, of the United States Army.

Dr. George Clymer, of the United States Navy.

The nominating Committee, after a brief conference, reported the following eight gentlemen to be members of the Committee of Revision and Publication, to act in conjunction with the President appointed by resolution :

Dr. Franklin Bache, of Philadelphia.

Dr. Edward R. Squibb, of New York.

Mr. Charles T. Carney, of Boston.

Dr. Henry T. Cummings, of Portland.

Mr. William Procter, Jr., of Philadelphia.

Dr. Joseph Carson, of Philadelphia.

Mr. William S. Thompson, of Baltimore.

Mr. Alfred B. Taylor, of Philadelphia.

These nominations were then confirmed by a vote of the Convention.

The next subject that engaged the attention of the Convention was the mode of assembling the Convention of 1870, and the duty of reporting a plan was assigned to a Committee, consisting of Drs. Bache, Squibb, Miller, and Carson, and Mr. Andrews. This Committee reported in favour of adopting the rules which were passed in 1850 for assembling the present Convention, merely making the necessary changes in the dates. This report having been adopted, the following are the rules for calling together the Convention of 1870 :

1. The President of this Convention shall, on the first day of May, 1869, issue a notice, requesting the several

incorporated State Medical Societies, the incorporated Medical Colleges, the incorporated Colleges of Physicians and Surgeons, and the incorporated Colleges of Pharmacy throughout the United States, to elect a number of delegates, not exceeding three, to attend a General Convention, to be held at Washington on the first Wednesday in May, 1870.

2. The several incorporated bodies, thus addressed, shall also be requested by the President to submit the Pharmacopœia to a careful revision, and to transmit the result of their labours, through their delegates or through any other channel, to the next Convention.

3. The several medical and pharmaceutical bodies shall be further requested to transmit to the President of this Convention the names and residences of their respective delegates, as soon as they shall have been appointed, a list of whom shall be published, under his authority, for the information of the medical public, in the newspapers and medical journals, in the month of March, 1870.

4. In the event of the death, resignation, or inability to act of the President of the Convention, these duties shall devolve upon the Vice-Presidents in succession; or, should the Vice-Presidents also be prevented from serving, upon the Secretary or Assistant Secretary, the latter acting in the event of the inability of the former.

Mr. Meakim, under instructions from the New York College of Pharmacy, submitted a proposition, which was adopted, that the Index of the Pharmacopœia shall have its names so marked for the quantity of the syllables that

it may serve as a pronouncing vocabulary of the *Materia Medica*.

Mr. Procter suggested to the Committee of Revision and Publication the propriety of publishing the *Pharmacopœia* in a cheap form, so as to insure its general use by physicians and apothecaries. The expediency of this course met with general approval, and the President pledged the Committee to carry out the views of the Convention.

An informal discussion then arose on the subject of the weights and measures most suitable for the *Pharmacopœia*; after which the Convention adjourned *sine die*.

Soon after the adjournment of the Convention, Dr. Thomas E. Jenkins, of Kentucky, presented to the Secretary his credentials as a delegate from the College of Physicians and Surgeons of Louisville, Kentucky.

P R E F A C E.

THE decennial revision of the Pharmacopœia of the United States brings with it the necessity for numerous modifications of the work. This arises from the progress of science, which is very considerable in the interval of ten years. The Committee of Revision and Publication have realized this fact in the large amount of labour they have encountered in duly examining the mass of materials, manuscript and printed, bearing upon the proper execution of their duties. They have had occasion to make many additions to the work, and also many alterations both in the arrangement of its several parts and in the details, most of which require to be briefly explained for the benefit of the reader.

Extended application has been made of the process of *percolation* or *displacement* as an improved mode of extracting the soluble parts of medicines; and more ample directions than have heretofore been given are laid down in the PRELIMINARY NOTICES for conducting it with success. In many instances percolation has been substituted for maceration; and, wherever alternative processes are allowed, that by percolation is given first, to indicate that it should be preferred.

The terms, heretofore used to designate the fineness of powders, were necessarily vague and indefinite. To remedy this

defect, five grades of fineness have been adopted, and are strictly defined by the greater or less closeness of the meshes of a sieve through which they will severally pass.

In the Pharmacopœia of 1850 the strong mineral acids are taken sometimes by weight and sometimes by measure. There appeared to the Committee an obvious propriety in estimating their quantities in a uniform manner; and, as weighing is more convenient than measuring in the instance of heavy, corrosive liquids, these acids are always taken by weight. Four fixed oils, namely, *Oil of Sweet Almond*, *Neats-foot Oil*, *Flaxseed Oil*, and *Olive Oil*, appear as ingredients in certain preparations of the Pharmacopœia of 1850, and are taken by measure, with the exception of Olive Oil in one preparation. In the present Pharmacopœia these oils are taken by weight, a change of plan called for by their adhesive nature, which renders it more convenient to weigh than to measure them. *Clarified Honey* is another liquid which is uniformly estimated by weight in the present Pharmacopœia. In that of 1850 it is taken sometimes by weight and sometimes by measure.

The list of the MATERIA MEDICA has undergone the usual modifications of introductions and dismissions. Fifty-five medicines have been introduced, and twenty-six dismissed, as will appear by consulting the FIRST and SECOND TABLES appended to the work.

The PREPARATIONS have been increased by one hundred and eleven additions, while the dismissions have been only thirty-seven, as is shown by the THIRD and FOURTH TABLES. The Preparations are still thrown into classes; but these have been modified in the revision. The classes, containing metals, are uniformly designated by the metal present, thus removing the

exceptional headings, in the Pharmacopœia of 1850, of ALUMEN, CALX, MAGNESIA, POTASSA, and SODA, for which are substituted ALUMINIUM, CALCIUM, MAGNESIUM, POTASSIUM, and SODIUM. Other changes in the names of classes are AQUÆ for AQUÆ MEDICATÆ, CARBO for CARBO ANIMALIS, and VINA for VINA MEDICATA. The classes introduced are ALOË, ATROPIA, CADMIUM, CINCHONIA, COLLODIUM, LIQUORES, OLEORESINÆ, RESINÆ, and SANTONINUM. Collodium, in the Pharmacopœia of 1850, was not the title of a class, but was placed under ÆTHEREA. The class LIQUORES is peculiar to the Pharmacopœia of 1860. It contains twenty-one preparations, comprising fifteen out of the former nineteen Solutions, which, in the Pharmacopœia of 1850, were arranged in various places, together with six new ones. Of the four Solutions which disappear as such, one has been dismissed, *Liquor Potassæ Carbonatis*, one has been classed with SYRUPÆ under the changed name of *Syrupus Ferri Iodidi*, and one with AQUÆ under the changed name of *Aqua Ammoniæ*; while the fourth takes its alphabetical place, under the changed name of *Aqua Ammoniæ Fortior*, in the list of the Materia Medica, where it stood before. When the Solutions were scattered through the different classes, they could not be readily made to conform to an alphabetical arrangement, which has always been one of the features of the Pharmacopœia, adopted at the period of its first publication, and intended to facilitate reference. The two classes OLEORESINÆ and RESINÆ have well defined characters, and their introduction will meet with general approval. Of the five Oleoresins, those of *Capsicum*, *Lupulin*, and *Ginger* are newly introduced; while those of *Cubeb* and *Black Pepper* were formerly classed with the Fluid Extracts. The three Resins, those, namely, of *Jalap*,

May-apple, and *Scammony*, appear in the Pharmacopœia for the first time.

The dismissed classes of preparations are ALCOHOL, AQUA, GLYCERINA, PULPÆ, SPONGIA, STANNUM, and STYRAX. The members of the first three classes mentioned have been placed elsewhere, and those of the last four have been omitted.

In several instances there has been a change of position of preparations from one class to another, in order to effect a more strictly alphabetical arrangement. Thus, those Spirits, not placed heretofore under SPIRITUS, have all been transferred to that class. This has caused a change in position of certain Spirits, formerly arranged under ÆTHEREA and AMMONIA. The same principle of arrangement has placed *Tinctura Ferri Chloridi* under TINCTURÆ instead of FERRUM, and *Vinum Antimonii* under VINA instead of ANTIMONIUM. Again, the *Tincture of Camphor*, and the *Tinctures of the Oils of Peppermint* and *Spearmint* have, under the changed names of Spirits, been placed in the same class. Another example of change of position with change of name is afforded by the transfer of the *Infusions of Sassafras Pith* and of *Slippery Elm Bark*, under the altered names of Mucilages, to the class of MUCILAGINES.

Some explanation seems proper in this place of the changes in the names of certain *Liquores* to *Aquæ*, and of several *Tincturæ* to *Spiritus*. The Committee were disposed to consider all aqueous solutions of gases or of volatile substances as belonging to the class AQUÆ, and to restrict the term LIQUORES to solutions of non-volatile substances, water being generally the solvent. The carrying out of these views did not remove any preparation from the class AQUÆ, but transferred to it the former *Liquor*

Ammonizæ, under the changed name of *Aqua Ammonizæ*. The same principle of nomenclature necessarily placed in this class the newly introduced aqueous preparations of Chlorine, Orange Flowers, and Creasote, under the names of *Aqua Chlorinii*, *Aqua Aurantii Florum*, and *Aqua Creasoti*.

It is not easy to trace a sharp line of demarcation between Tinctures and Spirits. Tinctures are mostly medicines prepared with an alcoholic menstruum, in which they are only partly soluble. The Committee, though not prepared to apply this definition strictly in all cases, were convinced of the propriety of giving the name SPIRITUS to alcoholic solutions of volatile oils, whether concrete or liquid. Accordingly, they have changed the name of *Tincture of Camphor* to *Spirit of Camphor*, and those of the *Tinctures of the Oils of Peppermint* and *Spearmint* to *Spirits*, as already mentioned.

The Committee have, in every instance, discontinued the plan of referring to model processes for the way of conducting or completing certain formulas. This plan tended to cause mistakes by requiring the manipulator to look elsewhere for directions, which should be printed in the formula before him. These remarks apply particularly to the class EXTRACTA, where the plan objected to had the incidental disadvantage of destroying the alphabetical arrangement of the whole class in one series, by introducing sub-alphabets, which interfered with ready reference. Most of the Distilled Oils are prepared by a general formula, which may be properly referred to as applicable to the greater number; but this does not make it necessary to depart from the plan of one continuous alphabetical arrangement for the whole series.

In the Pharmacopœia of 1850, the alphabetical arrangement

is sometimes departed from, in order to give a scientific sequence to some of the preparations. But the alphabetical and scientific arrangements are incompatible with each other; and, as the Committee had to choose between them, they decided in favour of the former, both in reference to the classes and the members under each class, as best fitted to render the work of practical utility.

The changes in the Latin officinal names are given in the FIFTH TABLE. The gender of the names of salts is changed from masculine to feminine, as conforming to the best latinity. This has given rise to slight changes in several names, consisting in making the adjectives agree with the gender adopted. The termination "uretum", except in "*Sulphuretum*", has been altered to "idum", which gives the new titles "*Cyanidum*" and "*Ferrocyanidum*". Wherever the word leaf is required to be rendered in Latin, *Folium* is used. *Calumba*, as the prevalent Latin name for this root, has been substituted for *Colomba*, and *Pulvis Ipecacuanhæ Compositus* for *Pulvis Ipecacuanhæ et Opii*, to conform to the universal British usage, and to favour the uniform application of the same name to an important preparation. Sweet spirit of nitre, the *Spiritus Ætheris Nitrici* of the Pharmacopœia of 1850, does not contain nitric acid. It is assumed by the Committee to contain the tetroxide of nitrogen, called frequently hyponitrous acid, but more properly nitrous acid. The latter name for the acid in question being preferred by the Committee, the name of this ether has been changed from *Spiritus Ætheris Nitrici* to *Spiritus Ætheris Nitrosi*.

The Table under consideration clearly exhibits the cases in which one old name has its equivalent in two or more new names. The division of aloes into the three kinds, generally

recognised, will give a precision to the prescriptions of physicians which has usually been wanting, and relieve the apothecary from the embarrassment, felt on many occasions, of making the choice. Improvements have also been made in adopting the division of *Orange Peel* into the bitter and sweet, and of *Mustard* into the white and black. The cases of the consolidation of two names into one are also clearly shown in this Table. It is highly important that the new Latin officinal names should be well understood; and that the old names should be constantly presented to the eye of the reader in connexion with the new ones. Accordingly, in the list of the *Materia Medica*, and in the titles of the several formulas, the Latin names of the *Pharmacopœia* of 1850 have been invariably subjoined to the new names, as was done in the last *Pharmacopœia*.

The changes in the English officinal names have not been tabulated. In many cases the Committee adopted the Latin officinal names as the English ones. Examples of Latin names, used as English, are *Angustura*, *Arnica*, *Calamus*, *Capsicum*, *Cimicifuga*, *Cinchona*, *Digitalis*, *Dracontium*, *Gaultheria*, *Sabatia*, *Serpentaria*, *Spigelia*, and *Stillingia*. By these substitutions a number of undesirable English names are got rid of, among which are *Leopard's-bane*, *Sweet Flag*, *Cayenne Pepper*, *Skunk Cabbage*, *Partridge-berry*, *American Centaury*, and *Queen's-root*. In carrying out the same plan of nomenclature, thirteen English officinal names of medicines, introduced into the *Materia Medica* list, have been made the same as the Latin names. Other changes in the English nomenclature are *Cantharides* for *Spanish Flies*, *Elder* for *Elder Flowers*, *Pale Rose* for *Hundred-leaved Roses*, and *Safflower* for *Dyers' Saffron*.

Changes of minor importance have been made in the English

names of some of the CERATES, LINIMENTS, MIXTURES, PILLS, PLASTERS, and OINTMENTS. Two plans were originally adopted in naming these preparations. Sometimes the initial word of the officinal title is the name of the chief substance present in the preparation; at other times it is the name of the class to which it belongs. Thus, the Pharmacopœia of 1850 has *Camphor Liniment* and *Liniment of Turpentine*, *Ammoniac Plaster* and *Plaster of Ammoniac with Mercury*, *Stramonium Ointment* and *Ointment of Belladonna*, *Sulphur Ointment* and *Ointment of Iodine*, &c. In cases like these the Committee have preferred the nomenclature which gives precedence to the name of the class to which the preparation belongs; and, accordingly, they have made about forty changes of this kind. The rule, however, was not made absolute; but exceptions were admitted in a few cases, in which the present names have been settled by so long usage as to make it inexpedient to change them.

Wherever the genius of the language would admit of it, plural English officinal names have been made singular. Instances of this change are *Almond* for *Almonds*, *Cubeb* for *Cubeb*s, *Fig* for *Figs*, *Nutgall* for *Galls*, *Prune* for *Prunes*, *Oil of Lemon* for *Oil of Lemons*, and *Rose* for *Roses*.

The SIXTH TABLE gives the changes in the position of medicines by transfer from one list to another. The third head here enumerates a few medicines, which have been transferred from the Preparations to the Primary List of the Materia Medica. It is probable that, in future revisions, the list of medicines, so transferred, will be larger, on account of the number of preparations, increasing every year, which are made by the manufacturing chemist instead of the apothecary.

The SEVENTH and LAST TABLE presents an explicit state-

ment of the Latin officinal names which have been changed in their meaning. To retain names with changed meanings is always objectionable; yet sometimes it can hardly be avoided.

Influenced by the desire to make the Pharmacopœia more convenient for ready consultation, the Committee have given but one INDEX, including both the Latin and English names. The Latin names are accentuated in obedience to the directions of the Convention. A TABLE OF CONTENTS is prefixed to the work for the first time. A Table of this kind is not strictly necessary where the Index is full; but it serves a useful purpose by giving a view of the divisions of the work at a glance.

The recurring revisions of our national Pharmacopœia at decennial periods may now be considered as a fixed rule of the work. The last interval has been one of great activity in Medicine and Pharmacology. This fact, so creditable to science, has been a cause of proportionate labour to the Committee. On no former revision have the materials referred to the Revising Committee been so voluminous and important as on the present. These required careful comparison, and the exercise of deliberate judgment in selecting the parts best adapted to the improvement of the work, and in reducing them to a consistent whole. The contributions of the College of Physicians of Philadelphia and of the Philadelphia College of Pharmacy comprise a revision of the Pharmacopœia of 1850 fully written out, and in a form nearly ready for the press; while the printed Report of the Joint Committee of the New York College of Pharmacy and of the New York Academy of Medicine, occupying more than two hundred pages, is rich in valuable observations and suggestions bearing upon the revision. Besides these, important private contributions were received, which required careful considera-

tion. This abundance of materials, while it increased the labours of the Committee, tended greatly to the improvement of the work. They held one hundred and nineteen meetings, generally once a week, and performed a large part of their duties through the agency of Subcommittees, who worked in the intervals, and made one hundred and thirty-eight written reports. The Committee believe that they have exercised all due diligence in the performance of their task, and think, considering the multiplicity of the details, the numerous appeals to experiment that were necessary, the differences of opinion among themselves which gave rise to numerous discussions, and the vigilance required to preserve the unities of the work, that the labour devolved upon them could not have been properly accomplished in less time, due regard being had to their private avocations.

The subject of weights and measures was a perplexing one to the Committee. The final conclusion come to as to weights was to use exclusively in the formulas the grain and the troy ounce, the latter always printed, troyounce, as one word. The term, *pound*, has been disused in them, in order to avoid the liability to mistakes from confounding the troy and avoirdupois pounds; and the new word *troyounce* distinctly indicates a weight of four hundred and eighty grains, which cannot be replaced by the avoirdupois ounce through ignorance. Wine measure, as heretofore, is employed in all the formulas; the only change being the disuse of the term "gallon," which measure, wherever it occurs in the *Pharmacopœia* of 1850, is expressed in pints. The adoption of Imperial measure would have secured the advantages of uniformity with the liquid measures used throughout the British Empire; but, so long as the United States con-

tinue to legalize the wine measure, it is proper that physicians and apothecaries should conform to it.

Notwithstanding the pains which have been taken to avoid errors, some, no doubt, have been overlooked, and an entire congruity of the several parts of the work may be found to be wanting; still the Committee have the satisfaction of knowing that they have performed their duties with conscientious zeal, and with a sincere desire to present to the public an accurate and trustworthy Pharmacopœia.

PHILADELPHIA, *June*, 1863.

TABLE OF CONTENTS.

PRELIMINARY NOTICES.

	PAGE
Weights and Measures.....	1
Temperature.....	2
Specific Gravity.....	3
Saturation.....	3
Stoppage of Bottles.....	3
Percolation.....	3
Fineness of Powders.....	7

MATERIA MEDICA.

Primary List.....	9
Secondary List.....	56

PREPARATIONS.

Aceta.....	65
Acida.....	69
Aconitia.....	82
Ætherea.....	84
Aloe.....	89
Aluminium.....	90
Ammonia.....	91
Antimonium.....	92
Aquæ.....	97

	PAGE
Argentum	104
Arsenicum	107
Atropia.....	108
Barium.....	110
Bismuthum	111
Cadmium	115
Calcium	116
Carbo	119
Cerata.....	119
Cinchonia.....	124
Collodium.....	125
Confectiones.....	128
Cuprum	130
Decocta.....	131
Emplastra.....	135
Extracta	142
Extracta Fluida.....	162
Ferrum	180
Hydrargyrum.....	195
Infusa	202
Linimenta	214
Liquores	216
Magnesium.....	231
Mellita.....	232
Misturæ.....	233
Morphia.....	237
Mucilagines.....	240
Olea Destillata.....	242
Oleoresinæ.....	248
Pilulæ.....	251
Plumbum.....	260
Potassium.....	261
Pulveres.....	271

	PAGE
Quinia.....	274
Resinæ.....	278
Santoninum.....	280
Sodium.....	282
Spiritus.....	287
Strychnia.....	295
Sulphur.....	298
Syrupi.....	299
Tincturæ.....	314
Trochisci.....	339
Unguenta.....	344
Veratria.....	353
Vina.....	355
Zincum.....	359

TABLES.

Table of Medicines introduced into the Materia Medica.....	365
Table of Medicines dismissed from the Materia Medica.....	367
Table of Medicines introduced into the Preparations.....	368
Table of Medicines dismissed from the Preparations.....	371
Table of Changes in the Latin Official Names.....	372
Table of Changes in the Position of Medicines.....	374
Table of Changes in the Meaning of Names.....	376
INDEX.....	377

PRELIMINARY NOTICES.

WEIGHTS AND MEASURES.

THE weights and measures used by physicians and apothecaries in the United States, when prescribing and preparing medicines, are the following.

Weights.—These are derived from the *troy pound*, and are exhibited in the following table, with their signs annexed:

The pound lb	}	contains	{ twelve ounces,	$\overline{3}$
The ounce			{ eight drachms,	$\overline{3}$
The drachm			{ three scruples,	$\overline{3}$
The scruple			{ twenty grains,	gr.

In order to avoid the danger of mistakes from confounding the troy and avoirdupois pounds, the term, *pound*, is disused in the formulas of this work, and the desired weight is expressed in ounces, each containing four hundred and eighty grains. This ounce is always printed *troyounce*, to guard against the error of substituting for it the avoirdupois ounce, consisting of four hundred and thirty-seven and a half grains. The drachm

and scruple are also disused, and replaced by their equivalents in grains.

It is highly important that persons engaged in preparing medicines should be provided with troy weights. But those who are not so provided can make their avoirdupois weights available as substitutes for troy weights, by bearing in mind that 42·5 grains, added to the avoirdupois ounce, will make it equal to the troy ounce; and that 1240 grains, deducted from the avoirdupois pound, will reduce it to the troy pound.

Measures.—These are derived from the *wine gallon*, and are given in the following table, with their signs annexed:

The gallon C	}	contains	{ eight pints,	O
The pint			{ sixteen fluidounces,	f℥
The fluidounce			{ eight fluidrachms,	f℥
The fluidrachm			{ sixty minims,	℥

In this work the term *gallon* is not used, that measure being always expressed in pints.

At the temperature of 60°, a pint of distilled water weighs 7291·2 grains, a fluidounce 455·7 grains.

TEMPERATURE.

When there is occasion to indicate the degree of heat, the scale of Fahrenheit's thermometer is

employed. By the term, *gentle heat*, is meant any temperature between 90° and 100° .

SPECIFIC GRAVITY.

When the specific gravity of a substance is mentioned, its temperature is assumed to be at 60° .

SATURATION.

When an acid or alkali is directed to be saturated, the point of saturation is to be ascertained by means of litmus and turmeric, in the way usually followed by chemists.

STOPPAGE OF BOTTLES.

In all cases in which bottles are directed to be well stopped, they must be closed with glass stoppers.

PERCOLATION.

The kind of filtration, known as *percolation* or the *process of displacement*, directed in this Pharmacopœia, consists in subjecting a substance or substances, in powder, contained in a vessel called a *percolator*, to the solvent action of successive portions of a menstruum, in such a manner that the liquid, as it traverses the powder in its descent to the recipient, shall become charged with

the soluble portion of it, and pass from the percolator free from insoluble matter.

When the process is successfully conducted, the first portion of the filtered liquid, or *percolate*, will be nearly saturated with the soluble constituents of the substance treated; and, if the quantity of menstruum be sufficient for its exhaustion, the last portion will be nearly destitute of colour, odour, and taste.

The percolator should be either conical, or nearly cylindrical with a conical termination at the smaller end, and provided internally with a porous or colander-like partition or diaphragm, resting transversely immediately above its neck, for the support of the powder. Ordinary glass funnels, varying in capacity from one to eight pints, are to be preferred for most of the operations requiring percolation in this Pharmacopœia; but percolators may also be made of earthenware or tinned iron, especially of the latter material when required of large size. Tinned iron, however, should not be used when the liquid acts chemically on the material. In the several formulas in which percolators are used, their form and material will always be designated when there is a preference in these respects. In cases in

which these variations of the instrument are indifferent, the term percolator simply will be employed. When a funnel is used, a circular piece of muslin or of lint, pressed into the neck by means of a cork with notched sides, forms a good diaphragm; but in all cases a similar piece of muslin, moistened slightly with the menstruum, should be interposed between the diaphragm and the powder, to prevent the passage of the fine particles of the latter.

The substance to be subjected to percolation, after having been reduced by sifting to a uniform powder, of the fineness indicated in the formula, is to be put into a basin with from one-fourth to one-half of its weight of the menstruum, and the two rubbed together until the powder is uniformly moistened.

A portion of the powder is now to be carefully placed upon the diaphragm, prepared as above directed, and pressed gently until the muslin, resting against the sides of the percolator just above the neck, is covered with a uniform layer. The remainder of the powder is then to be transferred to the percolator, and compressed evenly and firmly, and the levelled surface covered with a circular piece of moistened muslin, so that the

liquid poured upon it may penetrate equably, and not disarrange the powder.

The percolator being now properly supported, with its neck in a bottle previously marked for the quantity or quantities of liquid to be percolated, the menstruum is to be poured on the muslin until the space above is nearly filled; and a layer of it must be constantly maintained above the powder, so as to prevent the access of air to its interstices, until all has been added, or until the requisite quantity of percolate has been obtained.

If the fineness of the powder and its arrangement in the percolator have been properly attended to, the percolate will pass out, by drops, with greater or less rapidity, according to the size of the percolator; but, if, by reason of accidental imperfection in the powder, or in the packing, the liquid pass more rapidly than this, the neck of the percolator should be obstructed by means of a cork until the requisite slowness has been attained.

When the dregs of a tincture are to be subjected to percolation, after maceration with all the menstruum, the liquid portion should be drained off, the solid portion packed in a percolator as before described, and the liquid gradually poured on until all has passed the surface, when, immediately, suffi-

cient of the original menstruum should be poured on to displace the absorbed liquid, until the prescribed quantity of the tincture has been obtained.

FINENESS OF POWDERS.

As different degrees of fineness are necessary in powders, according to their nature and mode of treatment, the special degree required is designated in the several formulas. For this purpose the terms very fine, fine, moderately fine, moderately coarse, and coarse are used;—the powder passed through a sieve of eighty or more meshes to the linear inch being designated as *very fine*; through one of sixty meshes, *fine*; through one of fifty meshes, *moderately fine*; through one of forty meshes, *moderately coarse*; and through one of twenty meshes, *coarse*.

MATERIA MEDICA.*

PRIMARY LIST.

ABSINTHIUM. *Wormwood.*

The tops and leaves of *Artemisia Absinthium*.

ACACIA. *Gum Arabic.*

The concrete juice of *Acacia vera*, and of other species of *Acacia*.

ACETUM. *Vinegar.*

Impure dilute acetic acid prepared by fermentation.

* In the catalogue of *Materia Medica*, the names of medicinal substances are given in Latin and English; and synonymes in English are added, when they serve to fix the meaning of less familiar officinal names. Such explanations as are necessary to identify the substances mentioned are also given, together with brief notes indicating the means of ascertaining the purity and genuineness of those most liable to be sophisticated. The names of the plants referred to, when not otherwise indicated, are those of Willdenow's edition of Linnæus's *Catalogus Specierum Plantarum*, and of the animals, those of the *Règne Animale* of Cuvier. When De Candolle is cited as authority, reference is had to the *Prodromus Systematis Naturalis* of that author.

Vinegar is not coloured by hydrosulphuric acid, and yields no precipitate when boiled with a solution of chloride of calcium. A fluidounce is saturated by not less than thirty-five grains of bicarbonate of potassa, and after saturation the liquid is free from acrid taste.

ACIDUM ACETICUM. *Acetic Acid.*

Acetic acid, of the specific gravity 1.047.

A colourless liquid having a pungent odour. It is wholly volatilized by heat, yields no precipitate with chloride of barium or nitrate of silver, and does not change colour on the addition of hydrosulphate of ammonia. When saturated with ammonia, it gives no precipitate with iodide of potassium. If silver be digested in it, and muriatic acid afterwards added, no precipitate will be formed. Of this acid one hundred grains saturate sixty grains of bicarbonate of potassa, and contain thirty-six grains of monohydrated acetic acid.

ACIDUM ARSENIOSUM. *Arsenious Acid.*

Sublimed arsenious acid in masses.

Arsenious Acid is entirely volatilized by heat, emits an alliaceous odour when thrown on ignited charcoal, and is completely dissolved by boiling water. The solution yields a yellow precipitate on the addition of hydrosulphuric acid, a lemon-yellow precipitate on the addition first of ammonia and then of nitrate of silver, and a green precipitate with potassa and sulphate of copper. Of this acid one hundred grains, boiled with dilute muriatic acid and then treated with hydrosulphuric acid, yield a deposit of tersulphuret of arsenic, weighing one hundred and twenty-four grains.

ACIDUM CHROMICUM. *Chromic Acid.*

In deep-red needleform crystals, deliquescent and very soluble in water, forming an orange-yellow solution. When

heated to a temperature between 356° and 374° , it melts into a reddish-brown liquid, which, on cooling, becomes a red, opaque, brittle mass. If a few drops of alcohol are allowed to fall on a small portion of the Acid, a vigorous action takes place, attended with an increase in bulk, and the liquid formed becomes yellowish-brown.

ACIDUM CITRICUM. *Citric Acid.*

In colourless crystals, wholly dissipated by a red heat, freely soluble in water, and soluble in alcohol. Its aqueous solution, saturated with ammonia, produces with chloride of calcium a white precipitate, which is soluble in cold, but insoluble in boiling water. It affords with acetate of lead a precipitate wholly soluble in nitric acid, and yields no precipitate when added in excess to a solution of carbonate of potassa. One hundred grains of Citric Acid saturate one hundred and fifty grains of bicarbonate of potassa.

ACIDUM LACTICUM. *Lactic Acid.*

A syrupy, nearly transparent liquid, of a pale-wine colour, having a slight, bland odour, and a very sour taste. Its specific gravity is 1.212. It unites in all proportions with water, alcohol, and ether. It is not precipitated by solution of acetate of lead, or of oxalate of ammonia; and, when saturated with ammonia, affords no precipitate with hydrosulphuric acid. When gently heated it yields no odour of acetic or butyric acid. Ninety grains of Lactic Acid are saturated by not less than seventy-five grains of bicarbonate of potassa. When it is treated with a caustic alkali in excess, the colour is not materially deepened.

ACIDUM MURIATICUM. *Muriatic Acid.*

An aqueous solution of hydrochloric acid gas, of the specific gravity 1.160.

A colourless liquid, entirely volatilized by heat. When diluted with distilled water, it yields no precipitate with hydrosulphuric acid, chloride of barium, or ammonia in excess, and does not dissolve gold-leaf, even with the aid of heat.

ACIDUM NITRICUM. *Nitric Acid.*

Nitric acid, of the specific gravity 1.420.

A colourless liquid, entirely volatilized by heat. It dissolves copper with the disengagement of red vapours, and, when diluted with distilled water, yields no precipitate with hydrosulphuric acid, nitrate of silver, or chloride of barium.

ACIDUM PHOSPHORICUM GLACIALE. *Glacial Phosphoric Acid.*

In colourless, transparent, glass-like masses, slowly deliquescent in the air, and soluble in water and alcohol. Its aqueous solution is not precipitated by hydrosulphuric acid, and no precipitate takes place after the liquid has stood for forty-eight hours. Chloride of barium causes a white precipitate, which is readily dissolved by an excess of the Acid. Ammonia in excess produces but a slight turbidness, and caustic potassa in excess evolves no ammonia.

ACIDUM SULPHURICUM. *Sulphuric Acid.*

Sulphuric acid, of the specific gravity 1.843.

A colourless, inodorous liquid, having an oily consistence. It is entirely volatilized by a strong heat, and, when diluted with distilled water, is not coloured by hydrosulphuric acid.

ACIDUM TARTARICUM. *Tartaric Acid.*

In colourless crystals, wholly or almost wholly dissipated by heat, and readily soluble in water. The solution, added in

excess to any neutral salt of potassa, produces a precipitate of bitartrate of potassa. With acetate of lead it yields a precipitate wholly soluble in nitric acid. One hundred grains of Tartaric Acid saturate one hundred and thirty-three and a half grains of bicarbonate of potassa.

ACONITI FOLIUM. *Aconite Leaf.*

Aconiti Folia, *Pharm.*, 1850.

The leaves of *Aconitum Napellus*.

ACONITI RADIX. *Aconite Root.*

The root of *Aconitum Napellus*.

ADEPS. *Lard.*

The prepared fat of *Sus Scrofa*.

Lard should be free from saline matter. Below the temperature of 90°, it has the consistence of a soft solid.

ALCOHOL. *Alcohol.*

Spirit of the specific gravity 0.835.

Alcohol is colourless, is wholly vaporizable by heat, and unites in all proportions with water and ether. Diluted with twenty parts of distilled water, it should yield little or no foreign odour.

ALCOHOL AMYLICUM. *Amylic Alcohol.*

Syn. Fusel Oil.

A peculiar alcohol, obtained by distillation from fermented grain or potatoes by continuing the process after the ordinary spirit has ceased to come over.

An oily, nearly colourless liquid, having a strong, offensive odour, and acrid, burning taste. Its specific gravity is 0·818, and its boiling point between 268° and 272°. It is sparingly soluble in water, but unites in all proportions with alcohol and ether. It does not take fire by contact with flame, and, when dropped on paper, does not leave a permanent greasy stain.

ALCOHOL DILUTUM. *Diluted Alcohol.*

Alcohol mixed with an equal measure of Distilled Water.

The specific gravity of Diluted Alcohol is 0·941.

ALCOHOL FORTIUS. *Stronger Alcohol.*

Spirit, of the specific gravity 0·817.

Stronger Alcohol, treated with a few drops of solution of nitrate of silver and exposed to a bright light, either remains unchanged, or lets fall a very scanty, dark precipitate. Its other properties correspond with those of officinal alcohol.

ALLIUM. *Garlic.*

The bulb of *Allium sativum*.

ALOE BARBADENSIS. *Barbadoes Aloes.*

The inspissated juice of the leaves of *Aloe vulgaris* (*Lamarck*).

ALOE CAPENSIS. *Cape Aloes.*

The inspissated juice of the leaves of *Aloe spicata* (*Thunberg*), and of other species of *Aloe*.

ALOE SOCOTRINA. *Socotrine Aloes.*

The inspissated juice of the leaves of Aloe Socotrina (*Lamarck*).

ALTHÆA. *Marshmallow.*

Althææ Radix, *Pharm.*, 1850.

The root of *Althæa officinalis*.

ALUMEN. *Alum.*

Sulphate of alumina and potassa.

When Alum is triturated with hydrate of lime or carbonate of soda, it does not yield the odour of ammonia.

ALUMINÆ ET AMMONIÆ SULPHAS. *Sulphate of Alumina and Ammonia.*

Syn. Ammonia-alum.

AMMONIACUM. *Ammoniac.*

The concrete juice of *Dorema Ammoniacum* (*Don, Trans. of the Linn. Soc.*).

AMMONIÆ CARBONAS. *Carbonate of Ammonia.*

In white, translucent masses, having a pungent ammoniacal odour. It is wholly dissipated by heat, and soluble without residue in water. On exposure to the air, it becomes opaque, falls into powder, and deteriorates by the loss of ammonia. When it is saturated with nitric acid, neither chloride of barium nor nitrate of silver causes a precipitate.

AMMONIÆ MURIAS. *Muriate of Ammonia.*

In translucent masses, entirely volatilized by heat, and wholly soluble in water. The solution slightly reddens litmus,

and gives no precipitate with chloride of barium. The salt, when rubbed with hydrate of lime or hydrate of potassa, emits the smell of ammonia.

AMMONIÆ SULPHAS. *Sulphate of Ammonia.*

In colourless, prismatic crystals, freely soluble in water, and decomposed and totally dissipated by a red heat. When rubbed with hydrate of lime or hydrate of potassa, the salt emits the smell of ammonia. Its solution yields a white precipitate with chloride of barium. In dilute solution it is scarcely precipitated by nitrate of silver.

AMYGDALA AMARA. *Bitter Almond.*

The kernel of the fruit of *Amygdalus communis*, variety *amara* (*De Candolle*).

AMYGDALA DULCIS. *Sweet Almond.*

The kernel of the fruit of *Amygdalus communis*, variety *dulcis* (*De Candolle*).

AMYLUM. *Starch.*

The fecula of the seed of *Triticum vulgare* (Kunth, *Gramineæ*, 438).

ANGUSTURA. *Angustura.*

The bark of *Galipea officinalis* (Hancock, *Trans. of the Medico-Bot. Soc.*).

ANISUM. *Anise.*

The fruit of *Pimpinella Anisum*.

ANTHEMIS. *Chamomile.*

The flowers of *Anthemis nobilis*.

ANTIMONII SULPHURETUM. *Sulphuret of Antimony.*

Native tersulphuret of antimony, purified by fusion.

Sulphuret of Antimony is wholly dissolved by muriatic acid with the aid of heat, hydrosulphuric acid gas being evolved. The solution yields a white precipitate when added to water; and the resulting liquid, after filtration, affords an orange-red precipitate with hydrosulphate of ammonia.

AQUA. *Water.*

Natural water in the purest attainable state.

For signs of the purity of Water, see *Aqua Destillata*.

AQUA AMMONIÆ FORTIOR. *Stronger Water of Ammonia.*

Liquor Ammoniae Fortior, *Pharm.*, 1850.

An aqueous solution of ammonia, of the specific gravity 0.900, and containing twenty-six per cent. of the gas.

Stronger Water of Ammonia has a very pungent odour of ammonia, is wholly volatilized by heat, and gives no precipitate with lime-water. It does not effervesce on the addition of dilute nitric acid, and, when saturated with that acid, does not yield a precipitate with carbonate of ammonia, nitrate of silver, or chloride of barium.

ARGENTUM. *Silver.*

A white metal, having the specific gravity 10.4. It is entirely dissolved by dilute nitric acid; and the solution yields with chloride of sodium a white precipitate, wholly soluble in ammonia. The solution, deprived of silver by means of

chloride of sodium, and filtered, is not coloured nor precipitated by hydrosulphuric acid.

ARNICA. *Arnica.*

The flowers of *Arnica montana*.

ARSENICUM. *Arsenic.*

A brittle metal, usually of a dark hue, but exhibiting a steel-gray colour and brilliant lustre when recently broken or sublimed. Its specific gravity is 5.88. When exposed to heat it sublimes without melting, giving rise to white vapours having a garlicky smell.

ASSAFOETIDA. *Assafetida.*

The concrete juice of the root of *Narthex Assafoetida* (Falconer, *Royle's Mat. Med.*).

AURANTII AMARI CORTEX. *Bitter Orange Peel.*

The rind of the fruit of *Citrus vulgaris*.

AURANTII DULCIS CORTEX. *Sweet Orange Peel.*

The rind of the fruit of *Citrus Aurantium*.

AURANTII FLORES. *Orange Flowers.*

The flowers of *Citrus Aurantium*, and of *Citrus vulgaris*.

AVENÆ FARINA. *Oatmeal.*

The meal prepared from the seed of *Avena sativa*.

BALSAMUM PERUVIANUM. *Balsam of Peru.*

The prepared juice of *Myrospermum Peruiferum* (*De Candolle*).

BALSAMUM TOLUTANUM. *Balsam of Tolu.*

The juice of *Myrospermum Toluiferum* (*De Candolle*).

BARYTÆ CARBONAS. *Carbonate of Baryta.*

Entirely soluble in dilute muriatic acid with effervescence. The solution formed is not coloured nor precipitated by ammonia or hydrosulphuric acid. When sulphuric acid is added in excess, the solution yields no precipitate with carbonate of soda.

BELLADONNÆ FOLIUM. *Belladonna Leaf.*

Belladonna, *Pharm.*, 1850.

The leaves of *Atropa Belladonna*.

BELLADONNÆ RADIX. *Belladonna Root.*

The root of *Atropa Belladonna* from plants more than two years old.

BENZOINUM. *Benzoin.*

The concrete juice of *Styrax Benzoin*.

BISMUTHUM. *Bismuth.*

Commercial bismuth of good quality.

A brittle crystalline metal, having a white colour with a reddish tint, and possessing considerable lustre. Its specific gravity is 9.8, and its melting point 507°. It dissolves readily and almost entirely in moderately strong nitric acid, forming

a solution, which, when added to distilled water, gives rise to a white precipitate.

Bismuth, as met with in commerce, usually contains a small proportion of arsenic, copper, and silver.

BROMINIUM. *Bromine.*

A dark-red liquid having a strong, disagreeable odour. It is entirely volatilized by heat in reddish vapour. Its specific gravity is 3. It is sparingly soluble in water, more soluble in alcohol, and still more so in ether. It destroys the colour of sulphate of indigo, and renders starch yellow.

BUCHU. *Buchu.*

The leaves of *Barosma crenata*, and of other species of *Barosma*.

CADMIUM. *Cadmium.*

A malleable metal, nearly as volatile as mercury, and of a tin-white colour. Its specific gravity is 8·7. It dissolves readily in nitric acid, forming a colourless solution, which yields, with hydrosulphate of ammonia, a lemon-yellow precipitate, insoluble in potassa, and not volatile at a red heat. Its neutral solution in nitric acid, after having been fully precipitated by carbonate of soda added in slight excess, yields a filtrate which is not affected by hydrosulphate of ammonia.

CAFFEA. *Coffee.*

The seed of *Coffea Arabica*.

CALCII CHLORIDUM. *Chloride of Calcium.*

Fused chloride of calcium.

In colourless, slightly translucent masses, hard and friable, deliquescent, and entirely soluble in water. The solution

yields white precipitates with nitrate of silver and oxalate of ammonia, and no precipitate with ammonia, with chloride of barium, or with ferrocyanide of potassium dissolved in a large quantity of water.

CALUMBA. *Columbo.*

Colomba, *Pharm.*, 1850.

The root of *Cocculus palmatus* (*De Candolle*).

CALX. *Lime.*

Lime recently prepared by calcination.

Upon the addition of water, Lime cracks and falls into powder with the evolution of heat. Muriatic acid dissolves it without effervescence, and the solution yields no precipitate with ammonia.

CALX CHLORINATA. *Chlorinated Lime.*

Syn. Chloride of Lime.

A compound resulting from the action of chlorine on hydrate of lime, and containing at least twenty-five per cent. of chlorine.

A grayish-white substance, in powder or friable lumps, dry or but slightly moist, and wholly dissolved by dilute muriatic acid with the escape of chlorine. Its solution quickly destroys vegetable colours. When forty grains of it, triturated with a fluidounce of distilled water, are well shaken with a solution of seventy-eight grains of crystallized sulphate of protoxide of iron and ten drops of sulphuric acid in two fluidounces of distilled water, a liquid is formed which does not yield a blue precipitate with ferridcyanide of potassium (red prussiate of potassa).

CAMPHORA. *Camphor.*

A peculiar concrete substance derived from *Camphora officinarum* (Nees, *Laurin.*, 88), and purified by sublimation.

CANELLA. *Canella.*

The bark of *Canella alba*.

CANNA. *Canna.*

Syn. Tous les Mois.

The fecula prepared from the rhizoma of an undetermined species of *Canna*.

CANTHARIS. *Cantharides.*

Cantharis vesicatoria.

CAPSICUM. *Capsicum.*

Syn. Cayenne Pepper.

The fruit of *Capsicum annum*, and of other species of *Capsicum*.

CARBO ANIMALIS. *Animal Charcoal.*

Charcoal prepared from bone.

CARBO LIGNI. *Charcoal.*

Charcoal prepared from wood.

CARDAMOMUM. *Cardamom.*

The fruit of *Elettaria Cardamomum* (Maton, *Act. Linn.*, 254).

CARUM. *Caraway.*

The fruit of *Carum Carui*.

CARYOPHYLLUS. *Cloves.*

The unexpanded flowers of *Caryophyllus aromaticus* (*De Candolle*).

CASCARILLA. *Cascarilla.*

The bark of *Croton Eleuteria*.

CASSIA FISTULA. *Purging Cassia.*

The fruit of *Cassia Fistula*.

CASSIA MARILANDICA. *American Senna.*

The leaves of *Cassia Marilandica*.

CASTOREUM. *Castor.*

A peculiar concrete substance obtained from Castor fiber.

CATARIA. *Catnep.*

The leaves of *Nepeta Cataria*.

CATECHU. *Catechu.*

An extract prepared principally from the wood of *Acacia Catechu*.

CERA ALBA. *White Wax.*

Yellow wax, bleached.

CERA FLAVA. *Yellow Wax.*

A peculiar concrete substance prepared by
Apis mellifica.

CETACEUM. *Spermaceti.*

A peculiar concrete substance obtained from
Physeter macrocephalus.

CETRARIA. *Iceland Moss.*

Cetraria Islandica (Acharius, *Lichenog. Univ.*).

CHENOPODIUM. *Wormseed.*

The fruit of *Chenopodium anthelminticum*.

CHIMAPHILA. *Pipsissewa.*

The leaves of *Chimaphila umbellata* (Pursh,
Flor. Amer. Sept.).

CHIRETTA. *Chiretta.*

The herb and root of *Agathotes Chirayta*.

CHLOROFORMUM VENALE. *Commercial Chloroform.*

A colourless liquid, varying in specific gravity from 1.45 to 1.49. Shaken with an equal volume of officinal sulphuric acid in a bottle closed with a glass stopper, it forms a mixture, which separates by rest into two layers; the upper one colourless, and the lower, consisting of the acid, of a brownish hue, which, after the lapse of twenty-four hours, becomes darker, but never quite black.

CHONDRUS. *Irish Moss.*

Chondrus crispus (Greville, *Alg. Brit.*).

CIMICIFUGA. *Cimicifuga*.

Syn. Black Snakeroot.

The root of *Cimicifuga racemosa* (Torrey and Gray, *Flor. of N. Amer.*).

CINCHONA FLAVA. *Yellow Cinchona*.

The bark of *Cinchona Calisaya* (Weddell, *Hist. Nat. des Quinquin.*, 30), called in commerce *Calisaya bark*, and containing not less than two per cent. of alkaloids yielding crystallizable salts.

CINCHONA PALLIDA. *Pale Cinchona*.

The bark of *Cinchona Condaminea* (Humb. and Bonpl., *Plant. Equinoct.*, i. 33), and of *Cinchona Micrantha* (Ruiz and Pavon, *Flor. Peruv.*, ii. 52).

CINCHONA RUBRA. *Red Cinchona*.

The bark of an undetermined species of *Cinchona*, called in commerce *red bark*, and containing not less than two per cent. of alkaloids yielding crystallizable salts.

CINNAMOMUM. *Cinnamon*.

The bark of *Cinnamomum Zeylanicum* (Nees, *Laurin.*), and of *Cinnamomum aromaticum* (Nees, *ibid.*).

COCCUS. *Cochineal.*

Coccus Cacti.

COLCHICI RADIX. *Colchicum Root.*

The cormus of *Colchicum autumnale*.

COLCHICI SEMEN. *Colchicum Seed.*

The seed of *Colchicum autumnale*.

COLOCYNTHIS. *Colocynth.*

The fruit, deprived of its rind, of *Citrullus Colocynthis* (Royle, *Mat. Med.*).

CONIUM. *Hemlock.*

Conii Folia, *Pharm.*, 1850.

The leaves of *Conium maculatum*.

COPAIBA. *Copaiba.*

The juice of *Copaifera multijuga*, and of other species of *Copaifera*.

COPTIS. *Goldthread.*

The root of *Coptis trifolia*.

CORIANDRUM. *Coriander.*

The fruit of *Coriandrum sativum*.

CORNUS FLORIDA. *Dogwood.*

The bark of *Cornus Florida*.

CREASOTUM. *Creasote.*

A peculiar substance obtained from wood-tar.

A colourless, oily, neuter liquid, having a strong, characteristic odour, and an acrid, burning taste. Its specific gravity is 1.046. When dropped on filtering paper, it causes a greasy stain, which wholly disappears, in ten minutes, upon being exposed to a heat of about 212°. It boils without alteration at 397°, and does not congeal at 17° below zero. It is sparingly soluble in water, but mixes in all proportions with alcohol and ether. It dissolves wholly and readily in an equal volume of acetic acid.

CRETA. *Chalk.*

Native, friable carbonate of lime.

Chalk is entirely soluble in dilute muriatic acid with effervescence, and the solution yields no precipitate with ammonia.

CROCUS. *Saffron.*

The stigmas of *Crocus sativus*.

CUBEBA. *Cubeb.*

The berries of *Piper Cubeba*.

CUPRI SUBACETAS. *Subacetate of Copper.*

Syn. Verdigris.

Impure subacetate of copper.

In masses of a pale-green colour, almost wholly soluble, with the aid of heat, in dilute sulphuric acid. Ammonia, added to the solution, produces a precipitate, which is entirely dissolved by an excess of the alkali.

CUPRI SULPHAS. *Sulphate of Copper.*

In blue crystals, slightly efflorescent in the air, and entirely soluble in water. Ammonia throws down from the solution a precipitate, which is wholly dissolved when the alkali is added in excess.

DIGITALIS. *Digitalis*.

The leaves of *Digitalis purpurea*, from plants of the second year's growth.

DULCAMARA. *Bittersweet*.

The stalks of *Solanum Dulcamara*.

ELATERIUM. *Elaterium*.

A substance deposited by the juice of the fruit of *Momordica Elaterium*, *Ecbalium agreste* (*Richard*).

ERGOTA. *Ergot*.

The diseased seed of *Secale cereale*.

ERIGERON. *Fleabane*.

The herb of *Erigeron heterophyllum*, and of *Erigeron Philadelphicum*.

ERIGERON CANADENSE. *Canada Fleabane*.

The herb of *Erigeron Canadense*.

EUPATORIUM. *Thoroughwort*.

The tops and leaves of *Eupatorium perfoliatum*, gathered after flowering has commenced.

EXTRACTUM CANNABIS. *Extract of Hemp*.

An alcoholic extract of the dried tops of *Cannabis sativa*, variety *Indica*.

EXTRACTUM GLYCYRRHIZÆ. *Liquorice*.

The extract of the root of *Glycyrrhiza glabra*.

FERMENTUM. *Yeast.*

A peculiar insoluble product of the fermentation of malt liquors.

FERRI SULPHURETUM. *Sulphuret of Iron.*

Protosulphuret of iron, prepared by melting together Iron in small pieces and Sublimed Sulphur.

FERRUM. *Iron.*

A malleable and very ductile metal, having the specific gravity 7·8. It has a fibrous texture, and requires a high heat for its fusion. The wire drawn from it is flexible and without elasticity.

FICUS. *Fig.*

The dried fruit of Ficus Carica.

FILIX MAS. *Male Fern.*

The rhizoma of Aspidium Filix mas.

FÆNICULUM. *Fennel.*

The fruit of Fœniculum vulgare (*De Candolle*).

GALBANUM. *Galbanum.*

The concrete juice of an undetermined plant.

GALLA. *Nutgall.*

A morbid excrescence upon Quercus infectoria.

GAMBOGIA. *Gamboge.*

The concrete juice of an undetermined tree.

GAULTHERIA. *Gaultheria.*

The leaves of *Gaultheria procumbens*.

GENTIANA. *Gentian.*

The root of *Gentiana lutea*.

GERANIUM. *Cranesbill.*

The rhizoma of *Geranium maculatum*.

GILLENIA. *Gillenia.*

The root of *Gillenia trifoliata*, and of *Gillenia stipulacea*.

GLYCERINA. *Glycerin.*

A colourless, inodorous, syrupy liquid, of a sweet taste, and having the specific gravity 1.25. It is soluble in water and in alcohol, but not in ether. Exposed to a full red heat, it takes fire, and burns with a blue flame. It is destroyed by distillation in contact with air, but may be distilled unchanged with steam. It combines with potassa and baryta, and also with sulphuric acid. When diluted with water, it affords no precipitate with hydrosulphate of ammonia or ferrocyanide of potassium.

GLYCYRRHIZA. *Liquorice Root.*

The root of *Glycyrrhiza glabra*.

GOSSYPIUM. *Cotton.*

A filamentous substance separated from the

seed of *Gossypium herbaceum*, and of other species of *Gossypium*.

GRANATI FRUCTÛS CORTEX. *Pomegranate Rind*.

The rind of the fruit of *Punica Granatum*.

GRANATI RADICIS CORTEX. *Bark of Pomegranate Root*.

The bark of the root of *Punica Granatum*.

GUAIACI LIGNUM. *Guaiacum Wood*.

The wood of *Guaiacum officinale*.

GUAIACI RESINA. *Guaiac*.

The concrete juice of *Guaiacum officinale*.

GUTTA-PERCHA. *Gutta-percha*.

The concrete juice of *Isonandra gutta* (Hooker, *Loudon's Journal of Botany*, 1848).

HÆMATOXYLON. *Logwood*.

The wood of *Hæmatoxylon Campechianum*.

HEDEOMA. *Hedeoma*.

Syn. American Pennyroyal.

The herb of *Hedeoma pulegioides*.

HELLEBORUS. *Black Hellebore*.

The root of *Helleborus niger*.

HORDEUM. *Barley*.

The decorticated seed of *Hordeum distichon*.

HUMULUS. *Hops.*

The strobiles of *Humulus Lupulus*.

HYDRARGYRUM. *Mercury.*

A silver-white metal, liquid at common temperatures, and having the specific gravity 13·5. It is wholly volatilized by heat, and is dissolved without residue by nitric acid. A globule made to roll over white paper occasions no trace. Pure sulphuric acid, agitated with it and afterwards evaporated, leaves no residue.

HYOSCYAMI FOLIUM. *Henbane Leaf.*

Hyoscyami Folia, *Pharm.*, 1850.

The leaves of *Hyoscyamus niger*.

HYOSCYAMI SEMEN. *Henbane Seed.*

The seed of *Hyoscyamus niger*.

ICHTHYOCOLLA. *Isinglass.*

The swimming bladder of *Acipenser Huso*, and of other species of fish.

IGNATIA. *Ignatia.*

Syn. Bean of Saint Ignatius.

The seed of *Strychnos Ignatia* (Lindley, *Flor. Med.*).

IODINIUM. *Iodine.*

In bluish-black, crystalline scales, having the metallic lustre. Its specific gravity is 4·9. When heated it first melts, and then rises in purple vapour. It is very slightly soluble in water, but freely so in alcohol and ether. Shaken with dis-

tilled water, it should communicate only a slight brown tinge. With starch in cold solution it produces a blue colour. When shaken in a dry glass bottle, it scarcely adheres to the surface.

IPECACUANHA. *Ipecacuanha*.

The root of *Cephaelis Ipecacuanha* (*De Candolle*).

JALAPA. *Jalap*.

The root of *Exogonium Purga* (Bentham, *Botanical Register*), *Ipomæa Jalapa* (*Nuttall*).

JUGLANS. *Butternut*.

The inner bark of the root of *Juglans cinerea*.

JUNIPERUS. *Juniper*.

The fruit of *Juniperus communis*.

KINO. *Kino*.

The inspissated juice of *Pterocarpus Marsupium* (*De Candolle*), and of other plants.

KRAMERIA. *Rhatany*.

The root of *Krameria triandra* (*De Candolle*).

LACTUCARIUM. *Lactucarium*.

The concrete juice of *Lactuca sativa*.

LAVANDULA. *Lavender*.

The flowers of *Lavandula vera* (*De Candolle*).

LEPTANDRA. *Leptandra*.

The root of *Veronica Virginica* (Linn.), *Leptandra Virginica* (Nuttall).

LIMONIS CORTEX. *Lemon Peel*.

The rind of the fruit of *Citrus Limonum* (De Candolle).

LIMONIS SUCCUS. *Lemon Juice*.

The juice of the fruit of *Citrus Limonum* (De Candolle).

LINI FARINA. *Flaxseed Meal*.

The meal prepared from the seed of *Linum usitatissimum*.

LINUM. *Flaxseed*.

The seed of *Linum usitatissimum*.

LITHIÆ CARBONAS. *Carbonate of Lithia*.

A white powder, sparingly soluble in water, and having a feeble alkaline reaction. It dissolves with effervescence in dilute sulphuric acid, and forms a freely soluble salt. It imparts to the flame of burning alcohol a carmine-red colour.

LOBELIA. *Lobelia*.

The herb of *Lobelia inflata*.

LUPULINA. *Lupulin*.

The yellow powder attached to the strobiles of *Humulus Lupulus*.

LYCOPODIUM. *Lycopodium.*

The sporules of *Lycopodium clavatum*, and of other species of *Lycopodium*.

MACIS. *Mace.*

The arillus of the fruit of *Myristica fragrans* (Houttuyn, *Nat. Hist.*).

MAGNESIÆ CARBONAS. *Carbonate of Magnesia.*

A white substance in powder or pulverulent masses, wholly dissolved by dilute sulphuric acid, forming a solution which does not afford a precipitate with oxalate of ammonia. Distilled water which has been boiled with it does not change the colour of turmeric, and yields no precipitate with chloride of barium or nitrate of silver.

MAGNESIÆ SULPHAS. *Sulphate of Magnesia.*

In colourless crystals, which slowly effloresce on exposure to the air, and are very soluble in water. The solution is not coloured nor precipitated by ferrocyanide of potassium, and gives off no muriatic acid upon the addition of sulphuric acid. One hundred grains of the salt, dissolved in water, and mixed with sufficient boiling solution of carbonate of soda to decompose it completely, yield a precipitate of carbonate of magnesia, which, when washed and dried, weighs thirty-four grains.

MANGANESII OXIDUM NIGRUM. *Black Oxide of Manganese.*

Native impure deutoxide of manganese in powder.

This Oxide should contain at least sixty-six per cent. of deutoxide of manganese.

MANGANESII SULPHAS. *Sulphate of Manganese.*

In colourless, or pale rose-coloured, transparent crystals, which, when deposited from a solution at a temperature between 68° and 86° , have the form of right rhombic prisms, and contain four equivalents of water. This salt is very soluble in water. The solution is not disturbed by tincture of nutgall, but affords with caustic alkalies a white precipitate, which soon becomes brown by exposure to the air. Hydrosulphate of ammonia throws down a flesh-coloured precipitate, and ferrocyanide of potassium, a white one.

MANNA. *Manna.*

The concrete juice, in flakes, of *Fraxinus Ornus*, and of *Fraxinus rotundifolia*.

MARANTA. *Arrow-root.*

The fecula of the rhizoma of *Maranta arundinacea*.

MARMOR. *Marble.*

Native, white, granular carbonate of lime.

Marble is wholly dissolved by dilute muriatic acid with effervescence; and the solution yields no precipitate with ammonia, or with an aqueous solution of sulphate of lime.

MARRUBIUM. *Horehound.*

The herb of *Marrubium vulgare*.

MASTICHE. *Mastic.*

The concrete juice of *Pistacia Lentiscus*.

MATICO. *Matico.*

The leaves of *Artanthe elongata* (*Miquel*).

MATRICARIA. *German Chamomile.*

The flowers of *Matricaria Chamomilla*.

MEL. *Honey.*

A liquid prepared by *Apis mellifica*.

MENTHA PIPERITA. *Peppermint.*

The herb of *Mentha piperita*.

MENTHA VIRIDIS. *Spearmint.*

The herb of *Mentha viridis*.

MEZEREUM. *Mezereon.*

The bark of *Daphne Mezereum*, and of
Daphne Gnidium.

MONARDA. *Horsemint.*

The herb of *Monarda punctata*.

MOSCHUS. *Musk.*

A peculiar concrete substance obtained from
Moschus moschiferus.

MYRISTICA. *Nutmeg.*

The kernel of the fruit of *Myristica fragrans*
(Houttuyn, *Nat. Hist.*).

MYRRHA. *Myrrh.*

The concrete juice of *Balsamodendron Myrrha*
(Nees, *Beschreib. Officinal. Pflanzen*).

NECTANDRA. *Nectandra*.

Syn. Bebeeru Bark.

The bark of *Nectandra Rodiei* (*Schomburg*).

NUX VOMICA. *Nux Vomica*.

The seed of *Strychnos Nux vomica*.

OLEUM AMYGDALÆ AMARÆ. *Oil of Bitter Almond*.

The oil obtained by distilling with water the kernels of the fruit of *Amygdalus communis*, variety *amara* (*De Candolle*).

Soluble in nitric acid at ordinary temperatures, without the evolution of nitrous acid fumes. When fifteen grains of potassa are added to a solution of fifteen minims of the Oil in two fluidrachms of alcohol, and the mixture is heated until the potassa is dissolved, and the solution is reduced by evaporation to about one-third of its original bulk, the resulting liquid has a brownish-yellow colour, and deposits no crystals upon standing for an hour in a cool place.

OLEUM AMYGDALÆ DULCIS. *Oil of Sweet Almond*.

Oleum Amygdalæ, Pharm., 1850.

The fixed oil obtained from the kernels of the fruit of *Amygdalus communis*, variety *dulcis* (*De Candolle*).

OLEUM BERGAMII. *Oil of Bergamot*.

The volatile oil obtained from the rind of the fruit of *Citrus Limetta* (*De Candolle*).

OLEUM BUBULUM. *Neats-foot Oil.*

The oil prepared from the bones of *Bos domesticus*.

OLEUM CAJUPUTI. *Oil of Cajeput.*

The volatile oil obtained from the leaves of *Melaleuca Cajuputi* (Roxburgh, *Trans. Lond. Medico-Bot. Society*).

OLEUM CAMPHORÆ. *Oil of Camphor.*

The volatile oil obtained from *Camphora officinarum*.

OLEUM CINNAMOMI. *Oil of Cinnamon.*

Syn. Oil of Ceylon Cinnamon.

The volatile oil obtained from the bark of *Cinnamomum Zeylanicum* (Nees, *Laurin.*).

OLEUM LIMONIS. *Oil of Lemon.*

The volatile oil obtained from the rind of the fruit of *Citrus Limonum* (*De Candolle*).

OLEUM LINI. *Flaxseed Oil.*

The oil obtained from the seed of *Linum usitatissimum*.

OLEUM MORRHUÆ. *Cod-liver Oil.*

The fixed oil obtained from the liver of *Gadus Morrhua*, and of other species of *Gadus*.

OLEUM MYRISTICÆ. *Oil of Nutmeg.*

The volatile oil obtained from the kernels of the fruit of *Myristica fragrans* (Houttuyn, *Nat. Hist.*).

OLEUM OLIVÆ. *Olive Oil.*

The oil obtained from the fruit of *Olea Europæa*.

OLEUM RICINI. *Castor Oil.*

The oil obtained from the seed of *Ricinus communis*.

OLEUM ROSÆ. *Oil of Rose.*

The volatile oil obtained from the petals of *Rosa centifolia*.

OLEUM SUCCINI. *Oil of Amber.*

The volatile oil obtained by the destructive distillation of amber.

OLEUM TEREBINTHINÆ. *Oil of Turpentine.*

The volatile oil distilled from the turpentine of *Pinus palustris*, and of other species of *Pinus*.

OLEUM THEOBROMÆ. *Oil of Theobroma.*

Syn. Butter of Cacao.

The concrete oil of the kernels of the fruit of *Theobroma Cacao*.

OLEUM THYMI. *Oil of Thyme.*

The volatile oil obtained from *Thymus vulgaris*.

OLEUM TIGLII. *Croton Oil.*

The oil obtained from the seed of *Croton Tiglium*.

OPIUM. *Opium.*

The concrete juice of the unripe capsules of *Papaver somniferum*.

Opium should yield at least seven per cent. of morphia by the officinal process.

OS. *Bone.*

OVUM. *Egg.*

The egg of *Phasianus Gallus*.

PAPAVER. *Poppy.*

The ripe capsules of *Papaver somniferum*.

PAREIRA. *Pareira Brava.*

The root of *Cissampelos Pareira*.

PEPO. *Pumpkin Seed.*

The seed of *Cucurbita Pepo*.

PHOSPHORUS. *Phosphorus.*

A translucent, nearly colourless solid, resembling wax, without taste, but having a peculiar smell. Its specific gravity is 1.8. It is extremely inflammable, and should be kept under

water, and protected from the light. When exposed to the air it emits white fumes, which are luminous in the dark.

PIMENTA. *Pimento.*

The unripe berries of *Eugenia Pimenta* (*De Candolle*).

PIPER. *Black Pepper.*

The berries of *Piper nigrum*.

PIX BURGUNDICA. *Burgundy Pitch.*

The prepared concrete juice of *Abies excelsa* (*Lamarck, Encyc. Méthod.*).

PIX CANADENSIS. *Canada Pitch.*

Syn. Hemlock Pitch.

The prepared concrete juice of *Abies Canadensis* (*Michaux, N. Am. Sylva*).

PIX LIQUIDA. *Tar.*

The impure turpentine procured by burning from the wood of *Pinus palustris*, and of other species of *Pinus*.

PLUMBI ACETAS. *Acetate of Lead.*

Syn. Sugar of Lead.

In colourless crystals, which effloresce on exposure to the air. It is dissolved by distilled water, with a slight turbidness, which is removed by the addition of distilled vinegar. With its solution, carbonate of soda produces a white, iodide of potassium a yellow, and hydrosulphuric acid a black pre-

cipitate. Upon the addition of sulphuric acid, vapour is evolved having the smell of vinegar

PLUMBI CARBONAS. *Carbonate of Lead.*

Syn. White Lead.

A white substance, in powder or pulverulent masses, insoluble in water, but soluble with effervescence in dilute nitric acid. Potassa, added to the solution, produces a white precipitate, which is wholly dissolved by an excess of the alkali. Heat renders it yellow, and, with the aid of charcoal, reduces it to the metallic state.

PLUMBI NITRAS. *Nitrate of Lead.*

In white, nearly opaque, octohedral crystals, permanent in the air, and of a sweet, astringent taste. It is soluble in seven and a half parts of cold water, and in alcohol. Its solution is precipitated black by hydrosulphate of ammonia, white by ferrocyanide of potassium, and yellow by iodide of potassium. When triturated with sulphuric acid it forms a mixture, which colours morphia red, and, on being heated, evolves nitrous fumes.

PLUMBI OXIDUM. *Oxide of Lead.*

Plumbi Oxidum Semivitreum, *Pharm.*, 1850.

Syn. Litharge.

In small, yellowish or orange-coloured scales, insoluble in water, but almost wholly soluble with slight effervescence in dilute nitric acid. The solution is affected by potassa like that of carbonate of lead in the same acid. Heated with charcoal it is reduced to the metallic state.

PODOPHYLLUM. *May-apple.*

The rhizoma of *Podophyllum peltatum*.

POTASSÆ BICHROMAS. *Bichromate of Potassa.*

In orange-red, anhydrous, tabular crystals, soluble in ten parts of cold, and in much less of boiling water, forming a solution having an acid reaction. Exposed to a red heat it evolves oxygen; neutral chromate of potassa and sesquioxide of chromium being left. When the residue is acted on by water, the sesquioxide remains undissolved.

POTASSÆ BITARTRAS. *Bitartrate of Potassa.*

Syn. Cream of Tartar.

Bitartrate of Potassa is dissolved sparingly by water, but freely by a hot solution of potassa, which deposits it again upon the addition of an acid. Whatever remains undissolved by the alkaline solution is impurity. The precipitate produced with its aqueous solution by chloride of barium is soluble in nitric acid. It reddens litmus, and by a red heat is converted into carbonate of potassa.

POTASSÆ CARBONAS IMPURA. *Impure Carbonate of Potassa.*

Potassæ Carbonas Impurus, *Pharm.*, 1850.

The impure carbonate of potassa, known in commerce by the name of *pearlash*.

The soluble matter, contained in one hundred grains, neutralizes not less than fifty-eight grains of officinal sulphuric acid.

POTASSÆ CHLORAS. *Chlorate of Potassa.*

In colourless, tabular crystals, which have a pearly lustre, and are wholly soluble in distilled water. The solution yields no precipitate with nitrate of silver. When strongly heated the salt first melts, and afterwards gives off abundance of pure oxygen; the evolution of which having ceased, the residue is chloride of potassium. When a little sulphuric acid is dropped on the crystals, they become first yellow and then red.

POTASSÆ NITRAS. *Nitrate of Potassa.*

In colourless, prismatic crystals, unalterable in the air, and wholly soluble in water. The solution yields no precipitate with chloride of barium or nitrate of silver. With bichloride of platinum it gives a yellow precipitate. By a strong heat the salt is first melted and then decomposed, oxygen escaping, and a salt remains which emits orange-coloured fumes on the addition of sulphuric acid. If one hundred grains of Nitrate of Potassa, previously dried, be mixed with sixty grains of officinal sulphuric acid, and the mixture be kept at a red heat until the salt ceases to lose weight, the residue will weigh eighty-six grains.

POTASSÆ PERMANGANAS. *Permanganate of Potassa.*

In needle-shaped crystals, of a deep-purple colour. It is soluble in sixteen parts of cold water, with the exception of a scanty, brown matter. A very dilute solution has a rose colour, free from green tinge, and is instantly decolorized by the officinal solution of arsenite of potassa, with the formation of a brown precipitate.

POTASSÆ SULPHAS. *Sulphate of Potassa.*

In hard, colourless crystals, unalterable in the air, sparingly soluble in cold water, and insoluble in alcohol. The solution is not precipitated by ammonia. With bichloride of platinum it yields a yellow precipitate, and with chloride of barium a white one, insoluble in nitric acid.

POTASSII FERROCYANIDUM. *Ferrocyanide of Potassium.*

Potassii Ferrocyanuretum, *Pharm.*, 1850.

In crystals of a lemon-yellow colour, wholly soluble in water. The solution yields with most of the salts of sesquioxide

of iron a deep-blue precipitate, and with the salts of copper a brown one. Exposed to a gentle heat, it becomes white, and loses twelve and a half per cent. of water.

PRUNUM. *Prune.*

The dried fruit of *Prunus domestica*.

PRUNUS VIRGINIANA. *Wild-cherry Bark.*

The bark of *Cerasus serotina* (*De Candolle*).

QUASSIA. *Quassia.*

The wood of *Simaruba excelsa* (*De Candolle*).

QUERCUS ALBA. *White-oak Bark.*

The bark of *Quercus alba*.

QUERCUS TINCTORIA. *Black-oak Bark.*

The bark of *Quercus tinctoria*.

RESINA. *Resin.*

The residue after the distillation of the volatile oil from the turpentine of *Pinus palustris*, and of other species of *Pinus*.

RHEUM. *Rhubarb.*

The root of *Rheum palmatum*, and of other species of *Rheum*.

ROSA CENTIFOLIA. *Pale Rose.*

The petals of *Rosa centifolia*.

ROSA GALLICA. *Red Rose.*

The petals of *Rosa Gallica*.

ROSMARINUS. *Rosemary.*

The tops of *Rosmarinus officinalis*.

RUBUS. *Blackberry Root.*

The root of *Rubus Canadensis*, and of *Rubus villosus*.

SABADILLA. *Cevadilla.*

The seed of *Veratrum Sabadilla* (*Retzius*).

SABINA. *Savine.*

The tops of *Juniperus Sabina*.

SACCHARUM. *Sugar.*

The sugar of *Saccharum officinarum*, refined.

SACCHARUM LACTIS. *Sugar of Milk.*

A crystalline substance obtained from whey.

In hard, white masses, having a sweet taste, and the specific gravity 1.5. It is gritty between the teeth, and dissolves slowly in six parts of cold and in three of boiling water, without forming a syrup. It is insoluble in ether, and but slightly soluble in alcohol.

SAGO. *Sago.*

The prepared fecula of the pith of *Sagus Rumphii*, and of other species of *Sagus*.

SALVIA. *Sage.*

The leaves of *Salvia officinalis*.

SAMBUCUS. *Elder.*

The flowers of *Sambucus Canadensis*.

SANGUINARIA. *Bloodroot.*

The rhizoma of *Sanguinaria Canadensis*.

SANTALUM. *Red Saunders.*

The wood of *Pterocarpus santalinus*.

SANTONICA. *Santonica.*

Syn. Levant Wormseed.

The unexpanded flowers and peduncles of *Artemisia Contra*, and of other species of *Artemisia*.

SAPO. *Soap.*

Soap made with soda and olive oil.

SARSAPARILLA. *Sarsaparilla.*

The root of *Smilax officinalis* (*Humboldt and Bonpland*), and of other species of *Smilax*.

SASSAFRAS MEDULLA. *Sassafras Pith.*

The pith of the stems of *Sassafras officinale* (*Nees, Laurin.*).

SASSAFRAS RADICIS CORTEX. *Bark of Sassafras Root.*

The bark of the root of *Sassafras officinale* (*Nees, Laurin.*).

SCAMMONIUM. *Scammony.*

The concrete juice of the root of *Convolvulus Scammonia*.

Scammony does not effervesce on the addition of dilute muriatic acid, and the decoction, when cold, does not assume a blue colour on the addition of tincture of iodine. Ether dissolves at least seventy-five per cent. of it; and, when the ether has been evaporated, the residue, dissolved in a hot solution of caustic potassa, is not precipitated by dilute sulphuric acid.

SCILLA. *Squill.*

The bulb of *Scilla maritima*.

SCOPARIUS. *Broom.*

The tops of *Cytisus Scoparius* (*De Candolle*).

SENEGA. *Seneka.*

The root of *Polygala Senega*.

SENNA. *Senna.*

The leaflets of *Cassia acutifolia* (*Delile*), of *Cassia obovata* (*De Candolle*), and of *Cassia elongata* (*Lemaire, Journ. de Pharm.* vii. 345).

SERPENTARIA. *Serpentaria.*

Syn. Virginia Snakeroot.

The root of *Aristolochia Serpentaria*, of *Aristolochia reticulata*, and of other species of *Aristolochia*.

SEVUM. *Suet.*

The prepared suet of *Ovis Aries*.

SINAPIS ALBA. *White Mustard.*

The seed of *Sinapis alba*.

SINAPIS NIGRA. *Black Mustard.*

The seed of *Sinapis nigra*.

SODÆ ACETAS. *Acetate of Soda.*

In white or colourless crystals, which effloresce in dry air, and are wholly soluble in water. The solution yields no precipitate with carbonate of soda, bichloride of platinum, or chloride of barium, and, if dilute, is not precipitated by nitrate of silver. The salt is decomposed by sulphuric acid, with the production of an acetous odour.

SODÆ BORAS. *Borate of Soda.*

Syn. Borax.

In colourless crystals, which slightly effloresce in dry air, and are wholly soluble in water. The solution has an alkaline reaction. Sulphuric acid, added to the saturated solution, causes a precipitate in crystalline scales, which impart a green colour to the flame of alcohol.

SODÆ CARBONAS. *Carbonate of Soda.*

In colourless crystals, which rapidly effloresce on exposure to the air, and fall into a white powder. It is very soluble in water, and insoluble in alcohol. The solution has an alkaline reaction, and is decomposed with effervescence by acids. The precipitate produced with its solution by chloride of barium is wholly soluble in nitric acid.

SODÆ SULPHAS. *Sulphate of Soda.*

In colourless crystals, which rapidly effloresce on exposure to the air, and ultimately fall into a white powder. It is wholly dissolved by water. The solution does not alter the

colour of litmus or turmeric. With chloride of barium it yields a white precipitate insoluble in nitric acid. A dilute solution affords little or no precipitate with nitrate of silver. One hundred grains of the crystals lose fifty-five and a half grains by exposure to a strong heat.

SODÆ SULPHIS. *Sulphite of Soda.*

In white, efflorescent, prismatic crystals, soluble in four parts of cold, and in less than one part of boiling water. It has a sulphurous taste, and a feeble alkaline reaction. Sulphuric acid, added to its solution, gives rise to the odour of burning sulphur, without impairing the transparency of the liquid. The salt must be kept in well-stopped bottles.

SODII CHLORIDUM. *Chloride of Sodium.*

Syn. Common Salt.

A white salt, permanent in the air, and almost equally soluble in cold and boiling water. The solution yields no precipitate with carbonate of soda, chloride of barium, or ferrocyanide of potassium.

SPIGELIA. *Spigelia.*

Syn. Pinkroot.

The root of *Spigelia Marilandica*.

SPIRITUS FRUMENTI. *Whisky.*

Spirit obtained from fermented grain by distillation, and containing from forty-eight to fifty-six per cent. of absolute alcohol.

Whisky, for medicinal use, should be free from disagreeable odour, and not less than two years old.

SPIRITUS MYRCIÆ. *Spirit of Myrcia.*

Syn. Bay-rum.

The spirit obtained by distilling rum with the leaves of *Myrcia acris* (*Schwartz*).

SPIRITUS VINI GALlici. *Brandy.*

The spirit obtained from fermented grapes by distillation, and containing from forty-eight to fifty-six per cent. of absolute alcohol.

Brandy, for medicinal use, should be free from disagreeable odour, and not less than four years old.

STATICE. *Marsh Rosemary.*

The root of *Statice Limonium*, variety *Caroliniana*.

STILLINGIA. *Stillingia.*

The root of *Stillingia sylvatica*.

STRAMONII FOLIUM. *Stramonium Leaf.*

Stramonii Folia, *Pharm.*, 1850.

The leaves of *Datura Stramonium*.

STRAMONII SEMEN. *Stramonium Seed.*

The seed of *Datura Stramonium*.

STYRAX. *Storax.*

The prepared juice of *Liquidambar orientale* (*Lamarck*).

SULPHUR LOTUM. *Washed Sulphur.*

Sublimed Sulphur, thoroughly washed with water.

Washed Sulphur is wholly volatilized by heat, and, when moistened with water, does not change the colour of litmus.

SULPHUR SUBLIMATUM. *Sublimed Sulphur.*

Sulphur, *Pharm.*, 1850.

Sublimed Sulphur is wholly volatilized by heat.

SYRUPUS FUSCUS. *Molasses.*

The impure, dark-coloured syrup, obtained in making sugar from *Saccharum officinarum*.

TABACUM. *Tobacco.*

The commercial dried leaves of *Nicotiana Tabacum*.

TAMARINDUS. *Tamarind.*

The preserved fruit of *Tamarindus Indica*.

TAPIOCA. *Tapioca.*

The fecula of the root of *Janipha Manihot* (*Bot. Mag.* 3071).

TARAXACUM. *Dandelion.*

The root, gathered in the autumn, of *Taraxacum Dens-leonis* (*De Candolle*).

TEREBINTHINA. *Turpentine.*

The concrete juice of *Pinus palustris*, and of other species of *Pinus*.

TEREBINTHINA CANADENSIS. *Canada Turpentine.*

Syn. Balsam of Fir.

The juice of *Abies balsamea* (Lindley, *Flor. Med.*).

TESTA. *Oyster-shell.*

The shell of *Ostrea edulis*.

TRAGACANTHA. *Tragacanth.*

The concrete juice of *Astragalus verus* (*Olivier*), and of other species of *Astragalus*.

ULMUS FULVA. *Slippery-elm Bark.*

Ulmus, *Pharm.*, 1850.

The inner bark of *Ulmus fulva* (*Michaux*).

UVA PASSA. *Raisins.*

The dried fruit of *Vitis vinifera*.

UVA URSI. *Uva Ursi.*

The leaves of *Arctostaphylos Uva Ursi* (Sprengel, *Syst.* ii. 287).

VALERIANA. *Valerian.*

The root of *Valeriana officinalis*.

VANILLA. *Vanilla.*

The prepared, unripe capsules of *Vanilla aromatica*.

VERATRUM ALBUM. *White Hellebore.*

The rhizoma of *Veratrum album*.

VERATRUM VIRIDE. *American Hellebore.*

The rhizoma of *Veratrum viride*.

VINUM PORTENSE. *Port Wine.*

Vinum Rubrum, *Pharm.*, 1850.

VINUM XERICUM. *Sherry Wine.*

Vinum Album, *Pharm.*, 1850.

ZINCI SULPHAS. *Sulphate of Zinc.*

In colourless crystals, which effloresce on exposure to the air. It is soluble in water, and the solution affords white precipitates with ammonia, chloride of barium, ferrocyanide of potassium, and hydrosulphate of ammonia. The precipitate, thrown down by ammonia, is wholly soluble in an excess of the alkali.

ZINCUM. *Zinc.*

A bluish-white metal, having the specific gravity 6·8. It is almost entirely dissolved by dilute sulphuric acid, forming a colourless solution, which yields white precipitates with ferrocyanide of potassium and hydrosulphate of ammonia. Ammonia throws down from this solution a white precipitate, which is wholly dissolved when the alkali is added in excess.

ZINGIBER. *Ginger.*

The rhizoma of *Zingiber officinale* (Roscoe, *Trans. Linn. Soc.*).

SECONDARY LIST.

ACHILLEA. *Yarrow.*

The herb and flowers of *Achillea millefolium*.

ALETTRIS. *Star Grass.*

The root of *Aletris farinosa*.

ANGELICA. *Angelica.*

The root of *Angelica Archangelica*.

APOCYNUM ANDROSÆMIFOLIUM. *Dogs-bane.*

The root of *Apocynum androsæmifolium*.

APOCYNUM CANNABINUM. *Indian Hemp.*

The root of *Apocynum cannabinum*.

ARALIA NUDICAULIS. *False Sarsaparilla.*

The root of *Aralia nudicaulis*.

ARALIA SPINOSA. *Aralia Bark.*

The bark of *Aralia spinosa*.

ARUM. *Indian Turpip.*

The cormus of *Arum triphyllum*.

ASARUM. *Wild Ginger.*

The root of *Asarum Canadense*.

ASCLEPIAS. *Butterfly-weed.*

Asclepias Tuberosa, *Pharm.*, 1850.

The root of *Asclepias tuberosa*.

AZEDARACH. *Azedarach.*

The bark of the root of *Melia Azedarach.*

BERBERIS. *Barberry.*

The bark of the root of *Berberis vulgaris.*

BRAYERA. *Koosso.*

The flowers and unripe fruit of *Brayera anthelmintica.*

CALAMUS. *Calamus.*

The rhizoma of *Acorus Calamus.*

CAROTA. *Carrot Seed.*

The fruit of *Daucus Carota.*

CARTHAMUS. *Safflower.*

The flowers of *Carthamus tinctorius.*

CORNUS CIRCINATA. *Round-leaved Dogwood.*

The bark of *Cornus circinata.*

CORNUS SERICEA. *Swamp Dogwood.*

The bark of *Cornus sericea.*

COTULA. *May-weed.*

The herb of *Anthemis Cotula*, *Maruta Cotula*
(*De Candolle*).

CURCUMA. *Turmeric.*

The rhizoma of *Curcuma longa.*

CYDONIUM. *Quince Seed.*

The seed of *Cydonia vulgaris* (Persoon, *Enchir.* ii. 40).

CYPRIPEDIUM. *Cypripedium.*

The root of *Cypripedium pubescens*.

DELPHINIUM. *Larkspur.*

The seed of *Delphinium Consolida*.

DIOSPYROS. *Persimmon.*

The unripe fruit of *Diospyros Virginiana*.

DRACONTIUM. *Dracontium.*

The root of *Dracontium foetidum*, *Ictodes foetidus* (*Bigelow*), *Symplocarpus foetidus* (*Salisbury*).

EUONYMUS. *Wahoo.*

The bark of *Euonymus atropurpureus*.

EUPHORBIA COROLLATA. *Large-flowering Spurge.*

The root of *Euphorbia corollata*.

EUPHORBIA IPECACUANHA. *Ipecacuanha Spurge.*

The root of *Euphorbia Ipecacuanha*.

FRASERA. *American Columbo.*

The root of *Frasera Walteri* (*Michaux*).

GELSEMIUM. *Yellow Jasmine.*

The root of *Gelsemium sempervirens* (Gray, *Manual of Botany*).

GENTIANA CATESBÆI. *Blue Gentian.*

The root of *Gentiana Catesbæi* (*Elliot*).

GEUM. *Water Avena.*

The root of *Geum rivale*.

GOSSYPII RADIX. *Cotton Root.*

The root of *Gossypium herbaceum*, and of other species of *Gossypium*.

HELIANTHEMUM. *Frostwort.*

The herb of *Helianthemum Canadense* (*Michaux*).

HEPATICA. *Liverwort.*

The leaves of *Hepatica Americana* (*De Candolle*).

HEUCHERA. *Alum-root.*

The root of *Heuchera Americana*.

HYDRASTIS. *Hydrastis.*

The root of *Hydrastis Canadensis*.

INULA. *Elecampane.*

The root of *Inula Helenium*.

IRIS FLORENTINA. *Florentine Orris.*

The rhizoma of *Iris Florentina*.

IRIS VERSICOLOR. *Blue Flag.*

The rhizoma of *Iris versicolor*.

JUNIPERUS VIRGINIANA. *Red Cedar.*

The tops of Juniperus Virginiana.

LAPPA. *Burdock.*

The root of Lappa minor (*De Candolle*).

LIRIODENDRON. *Tulip-tree Bark.*

The bark of Liriodendron tulipifera.

LYCOPUS. *Bugle-weed.*

The herb of Lycopus Virginicus (*Michaux*).

MAGNOLIA. *Magnolia.*

The bark of Magnolia glauca, Magnolia acuminata, and Magnolia tripetala.

MELISSA. *Balm.*

The herb of Melissa officinalis.

MUCUNA. *Cowhage.*

The hairs of the pods of Mucuna pruriens (*De Candolle*).

OLEUM SESAMI. *Benne Oil.*

The oil of the seed of Sesamum Indicum, and of Sesamum orientale.

PANAX. *Ginseng.*

The root of Panax quinquefolium.

PETROSELINUM. *Parsley Root.*

The root of Petroselinum sativum (*Lindley, Flor. Med.*).

PHYTOLACCÆ BACCA. *Poke Berry.*

Phytolaccæ Baccæ, *Pharm.*, 1850.

The berries of Phytolacca decandra.

PHYTOLACCÆ RADIX. *Poke Root.*

The root of Phytolacca decandra.

POLYGALA RUBELLA. *Bitter Polygala.*

The root and herb of Polygala rubella.

PRINOS. *Black Alder.*

The bark of Prinos verticillatus.

PYRETHRUM. *Pellitory.*

The root of Anacyclus Pyrethrum (*De Candolle*).

RANUNCULUS. *Crowfoot.*

The cormus and herb of Ranunculus bulbosus.

RHUS GLABRUM. *Sumach.*

The fruit of Rhus glabrum.

ROTTLERA. *Kameela.*

The powder and hairs obtained from the capsules of Rottlera tinctoria (*Roxburgh*).

RUBIA. *Madder.*

The root of Rubia tinctorum.

RUMEX. *Yellow Dock.*

The root of Rumex crispus.

RUTA. *Rue.*

The leaves of *Ruta graveolens*.

SABBATIA. *Sabbatia.*

Syn. American Centaury.

The herb of *Sabbatia angularis* (Pursh, *Flor. Amer. Sept.*).

SALIX. *Willow.*

The bark of *Salix alba*.

SCUTELLARIA. *Scullcap.*

The herb of *Scutellaria lateriflora*.

SESAMI FOLIUM. *Benne Leaf.*

Sesami Folia, *Pharm.*, 1850.

The leaves of *Sesamum Indicum*, and of *Sesamum orientale*.

SIMARUBA. *Simaruba.*

The bark of the root of *Simaruba officinalis* (*De Candolle*).

SOLIDAGO. *Golden-rod.*

The leaves of *Solidago odora*.

SPIRÆA. *Hardhack.*

The root of *Spiræa tomentosa*.

TANACETUM. *Tansy.*

The herb of *Tanacetum vulgare*.

TORMENTILLA. *Tormentil.*

The root of *Potentilla Tormentilla* (*De Candolle*).

TOXICODENDRON. *Poison-oak.*

The leaves of *Rhus Toxicodendron*.

TRIOSTEUM. *Fever-root.*

The root of *Triosteum perfoliatum*.

VIOLA. *Violet.*

The herb of *Viola pedata*.

XANTHORRHIZA. *Yellow-root.*

The root of *Xanthorrhiza apiifolia*.

XANTHOXYLUM. *Prickly Ash.*

The bark of *Xanthoxylum fraxineum*.



PREPARATIONS.

ACETA.

ACETUM COLCHICI.

Vinegar of Colchicum.

Take of Colchicum Root, in fine powder, two troyounces ;
Diluted Acetic Acid a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Acetic Acid, allow it to stand for half an hour, pack it firmly in a conical glass percolator, and gradually pour upon it Diluted Acetic Acid until the filtered liquid measures two pints.

Vinegar of Colchicum may also be prepared by macerating the Colchicum Root, in moderately fine powder, with two pints of Diluted Acetic Acid, in a close glass vessel, for seven days ; then expressing the liquid, and filtering through paper.

ACETUM DESTILLATUM.

Distilled Vinegar.

Take of Vinegar eight pints.

Distil, by means of a sand-bath, from a glass retort into a glass receiver, seven pints.

Distilled Vinegar may be substituted for Diluted Acetic Acid in the preparation of the officinal vinegars.

Distilled Vinegar is wholly volatilized by heat, yields no precipitate with acetate of lead or nitrate of silver, and does not change colour upon the addition of hydrosulphuric acid or ammonia. If silver be digested in it, and muriatic acid afterwards added, no precipitate will be produced. One hundred grains saturate not less than seven and six-tenths grains of bicarbonate of potassa.

ACETUM LOBELIÆ.

Vinegar of Lobelia.

Take of Lobelia, in moderately coarse powder,
four troyounces ;

Diluted Acetic Acid a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Acetic Acid, pack it firmly in a conical glass percolator, and gradually pour upon it Diluted Acetic Acid until the filtered liquid measures two pints.

Vinegar of Lobelia may also be prepared by

macerating the powder in two pints of Diluted Acetic Acid for seven days, expressing the liquid, and filtering through paper.

ACETUM OPII.

*Vinegar of Opium.**Black Drop.*

Take of Opium, dried, and in moderately coarse powder, five troyounces ;
Nutmeg, in moderately coarse powder, a troyounce ;
Saffron, in moderately coarse powder, one hundred and fifty grains ;
Sugar eight troyounces ;
Diluted Acetic Acid a sufficient quantity.

Macerate the Opium, Nutmeg, and Saffron with a pint of Diluted Acetic Acid for twenty-four hours. Put the mixture into a conical glass percolator, and return the liquid which first passes until the filtrate becomes clear. Then gradually pour on Diluted Acetic Acid until the filtered liquid measures twenty-six fluidounces. In this dissolve the Sugar, and, having strained the solution, add sufficient Diluted Acetic Acid to make the whole measure two pints.

ACETUM SANGUINARIÆ.

Vinegar of Bloodroot.

Take of Bloodroot, in moderately coarse powder, four troyounces ;

Diluted Acetic Acid a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Acetic Acid, pack it firmly in a conical glass percolator, and gradually pour upon it Diluted Acetic Acid until the filtered liquid measures two pints.

Vinegar of Bloodroot may also be prepared by macerating the powder with two pints of Diluted Acetic Acid for seven days, expressing the liquid, and filtering through paper.

ACETUM SCILLÆ.*Vinegar of Squill.*

Take of Squill, in moderately coarse powder, four troyounces ;

Diluted Acetic Acid a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Acetic Acid, pack it in a conical glass percolator, and gradually pour upon it Diluted Acetic Acid until the filtered liquid measures two pints.

Vinegar of Squill may also be prepared by macerating the Squill with two pints of Diluted Acetic Acid for seven days, expressing the liquid, and filtering through paper.

ACIDA.

ACIDUM ACETICUM DILUTUM.

Diluted Acetic Acid.

Take of Acetic Acid a pint;

Distilled Water seven pints.

Mix them.

Diluted Acetic Acid has the specific gravity 1.006; and one hundred grains of it saturate seven and six-tenths grains of bicarbonate of potassa. It is affected by reagents in the same manner as Acetic Acid. (See *Acidum Aceticum*.)

ACIDUM BENZOICUM.

Benzoic Acid.

Take of Benzoin, in coarse powder, twelve troy-ounces.

Spread the Benzoin evenly over the bottom of an iron dish eight inches in diameter, cover the dish with a piece of filtering paper, and, by means of paste, attach it closely to the rim. Then, having prepared a conical receiver or cap of thick, well-

sized paper, of rather larger diameter than the dish, invert it over the latter, so as to fit closely around the rim. Next apply heat by means of a sand-bath, or of the iron plate of a stove, until, without much empyreuma, vapours of Benzoic Acid cease to rise. Lastly, separate the receiver from time to time, and remove the Benzoic Acid from it and the paper diaphragm, as long as the Acid continues to be deposited.

Benzoic Acid, thus obtained, is in white feathery crystals, of a peculiar, agreeable odour, and warm, acidulous taste. It is fusible, wholly volatilizable if cautiously heated, sparingly soluble in cold water, more soluble in boiling water, which deposits it in part on cooling, and very soluble in alcohol. It is dissolved by solutions of potassa, soda, ammonia, and lime, forming combinations from which it is precipitated by muriatic acid.

ACIDUM GALLICUM.

Gallic Acid.

Take of Nutgall, in fine powder, thirty-six troy-ounces ;

Purified Animal Charcoal,

Distilled Water, each, a sufficient quantity.

Mix the Nutgall with sufficient Distilled Water to form a thin paste, and expose the mixture to the air, in a shallow, glass or porcelain vessel in a

warm place, for a month, occasionally stirring it with a glass rod, and adding from time to time sufficient Distilled Water to preserve the semi-fluid consistence. Then submit the paste to expression, and, rejecting the expressed liquid, boil the residue in eight pints of Distilled Water for a few minutes, and filter while hot through Purified Animal Charcoal. Set the liquid aside that crystals may form, and dry them on bibulous paper. If the crystals be not sufficiently free from colour, they may be purified by dissolving them in boiling Distilled Water, filtering through a fresh portion of Purified Animal Charcoal, and again crystallizing.

Gallic Acid is in small, silky, nearly colourless crystals, having a slightly acid and astringent taste. It is soluble in one hundred parts of cold, and in three of boiling water. The solution reddens litmus, and does not produce a precipitate with a solution of gelatin, or of sulphate of protoxide of iron. With solutions of the salts of sesquioxide of iron, it occasions a bluish-black precipitate, the colour of which disappears when the liquid is heated. It is decomposed by a strong heat, and entirely dissipated when thrown on red-hot iron.

ACIDUM HYDRIODICUM DILUTUM.

Diluted Hydriodic Acid.

Take of Iodine, in fine powder, a troyounce ;

Distilled Water a sufficient quantity.

Mix thirty grains of the Iodine with five fluid-

ounces of Distilled Water in a tall glass-stoppered bottle, having the capacity of half a pint, and pass into the mixture hydrosulphuric acid gas until the colour of the Iodine entirely disappears, and a turbid liquid remains. Detach the bottle from the apparatus employed for introducing the gas, and gradually add the remainder of the Iodine, stirring at the same time. Then reattach the bottle, and again pass the gas until the liquid becomes colourless. Decant the liquid into a small matrass which it is nearly sufficient to fill, boil it until it ceases to emit the odour of hydrosulphuric acid, and filter through paper. Then pass sufficient Distilled Water through the filter to bring the filtered liquid to the measure of six fluidounces. Lastly, keep the liquid in a well-stopped bottle.

The hydrosulphuric acid gas, required in this process, may be obtained by mixing, in a suitable apparatus, a troyounce and a half of Sulphuret of Iron, two troyounces of sulphuric acid, and six fluidounces of water.

Diluted Hydriodic Acid is a sour liquid, colourless when recently prepared, and having the specific gravity 1.112. It is wholly volatilized by heat, and is decomposed by nitric and sulphuric acids, with the liberation of iodine. When kept in contact with the air, it gradually becomes brown, and acquires an iodine odour.

ACIDUM HYDROCYANICUM DILUTUM.

Diluted Hydrocyanic Acid.

Take of Ferrocyanide of Potassium two troy-ounces ;

Sulphuric Acid a troyounce and a half ;

Distilled Water a sufficient quantity.

Mix the Acid with four fluidounces of Distilled Water, and pour the mixture, when cool, into a glass retort. To this add the Ferrocyanide of Potassium, dissolved in ten fluidounces of Distilled Water. Pour eight fluidounces of Distilled Water into a cooled receiver, and, having attached this to the retort, distil, by means of a sand-bath, with a moderate heat, six fluidounces. Lastly, add to the product five fluidounces of Distilled Water, or as much as may be sufficient to render the Diluted Hydrocyanic Acid of such a strength, that twelve and seven-tenths grains of nitrate of silver, dissolved in distilled water, may be accurately saturated by one hundred grains of the Acid.

Diluted Hydrocyanic Acid, when wanted for immediate use, may be prepared in the following manner.

Take of Cyanide of Silver fifty grains and a half ;

Muriatic Acid forty-one grains ;

Distilled Water a fluidounce.

Mix the Muriatic Acid with the Distilled Water, add the Cyanide of Silver, and shake the whole together in a well-stopped vial. When the precipitate formed has subsided, pour off the clear liquid, and keep it for use.

Diluted Hydrocyanic Acid must be kept in well-stopped bottles, protected from the light.

A colourless liquid, having a peculiar odour, and wholly volatilized by heat. It imparts a faint, evanescent red colour to litmus, and is not discoloured by hydrosulphuric acid. With solution of nitrate of silver, added in slight excess, one hundred grains of it produce a white precipitate, which, when washed with water until the washings are tasteless, and dried at a temperature not exceeding 212° , weighs ten grains, and is wholly soluble in boiling nitric acid.

The Diluted Acid, prepared according to the above processes, contains two per cent. of anhydrous acid.

ACIDUM MURIATICUM DILUTUM.

Diluted Muriatic Acid.

Take of Muriatic Acid four troyounces;

Distilled Water a sufficient quantity.

Mix the Acid, in a glass vessel, with sufficient Distilled Water to make the Diluted Acid measure a pint.

The specific gravity of Diluted Muriatic Acid is 1.038.

ACIDUM NITRICUM DILUTUM.

Diluted Nitric Acid.

Take of Nitric Acid three troyounces ;

Distilled Water a sufficient quantity.

Mix the Acid, in a glass vessel, with sufficient Distilled Water to make the Diluted Acid measure a pint.

The specific gravity of Diluted Nitric Acid is 1.068.

ACIDUM NITROMURIATICUM.

Nitromuriatic Acid.

Take of Nitric Acid three troyounces ;

Muriatic Acid five troyounces.

Mix the Acids in a glass vessel, and, when effervescence has ceased, keep the product in a well-stopped bottle, in a cool place, protected from the light.

A liquid, having a deep golden-yellow colour, and the odour of chlorine. It readily dissolves gold-leaf, and is wholly volatilized by heat.

ACIDUM NITROMURIATICUM DILUTUM.

Diluted Nitromuriatic Acid.

Take of Nitric Acid a troyounce and a half ;

Muriatic Acid two troyounces and a half ;

Distilled Water a sufficient quantity.

Mix the Acids in a well-stopped bottle, having the capacity of a pint. Shake them together occasionally during twenty-four hours, and then add sufficient Distilled Water to make the Diluted Acid measure a pint. Lastly, keep it in a cool place, protected from the light.

ACIDUM PHOSPHORICUM DILUTUM.

Diluted Phosphoric Acid.

Take of Phosphorus three hundred and sixty grains;

Nitric Acid five troyounces, or a sufficient quantity;

Distilled Water a sufficient quantity.

Mix five troyounces of Nitric Acid with half a pint of Distilled Water, in a porcelain capsule, of the capacity of two pints. Add the Phosphorus, and invert over it a glass funnel of such dimensions that its rim may rest on the inside of the capsule, near the surface of the liquid. Place the capsule on a sand-bath, and apply a moderate heat until the Phosphorus is dissolved, and red vapours cease to arise. If the reaction become too violent, add a little Distilled Water; and, if the red vapours cease to be evolved before the Phosphorus is all dissolved, gradually add Nitric Acid,

diluted to the same extent as before with Distilled Water, until the solution is effected. Then, removing the funnel, continue the heat until the excess of nitric acid is driven off, and a syrupy liquid, free from odour and weighing two ounces, remains. Lastly, mix this, when cold, with sufficient Distilled Water to make it measure twenty fluidounces, and filter through paper.

Diluted Phosphoric Acid may also be prepared by dissolving a troyounce of Glacial Phosphoric Acid in three fluidounces of Distilled Water, adding to the solution forty grains of Nitric Acid, boiling it until reduced to a syrupy liquid, free from the odour of nitric acid, and then adding sufficient Distilled Water to make the Diluted Acid measure twelve fluidounces and a half.

A colourless, inodorous liquid, of the specific gravity 1.056. It is not precipitated by chloride of barium or nitrate of silver, when either is added in small proportion. It has no action on pure silver or copper, and is not discoloured by hydrosulphuric acid, added before or after contact with either of these metals. One hundred grains of it are saturated by twenty-three and four-tenths grains of bicarbonate of potassa, and no precipitate is produced.

ACIDUM SULPHURICUM AROMATICUM.

*Aromatic Sulphuric Acid.**Elixir of Vitriol.*

Take of Sulphuric Acid six troyounces ;
Ginger, in coarse powder, a troyounce ;
Cinnamon, in coarse powder, a troyounce and a half ;
Alcohol a sufficient quantity.

Add the Acid gradually to a pint of Alcohol, and allow the liquid to cool. Mix the Ginger and Cinnamon, and, having put them into a percolator, pour Alcohol gradually upon them until a pint of tincture is obtained. Lastly, mix the diluted acid and the tincture.

ACIDUM SULPHURICUM DILUTUM.

Diluted Sulphuric Acid.

Take of Sulphuric Acid two troyounces ;
Distilled Water a sufficient quantity.

Add the Acid gradually to fourteen fluidounces of Distilled Water, and mix them. Then filter through paper, and pass sufficient Distilled Water through the filter to make the Diluted Acid measure a pint.

The specific gravity of this acid is 1.082.

ACIDUM SULPHUROSUM.

Sulphurous Acid.

Take of Sulphuric Acid eight troyounces ;

Charcoal, in coarse powder, a troy-ounce ;

Distilled Water thirty-six fluidounces.

Pour the Acid upon the Charcoal, previously introduced into a matrass, and shake them together. Connect the matrass with a washing bottle, and this, by means of a bent glass tube reaching nearly to the bottom of it, with a two-necked bottle containing the Distilled Water. To the other neck of this bottle attach another bent tube, and let it dip slightly into a solution of carbonate of soda. All the joints having been properly luted, apply heat to the matrass until gas ceases to be evolved, preventing the temperature of the Distilled Water from rising, by means of cold water applied to the bottle containing it. Lastly, pour the Sulphurous Acid into half-pint bottles, which must be well stopped, and kept in a cool place.

A colourless liquid, having the odour of burning sulphur, and a sulphurous, sour, and somewhat astringent taste. Its specific gravity is about 1.035. When saturated with ammonia, and then treated with an excess of chloride of barium, it should afford a clear or nearly clear solution on the addition of muriatic acid in excess.

ACIDUM TANNICUM.

Tannic Acid.

Take of Nutgall, in fine powder,

Ether, each, a sufficient quantity.

Expose the Nutgall to a damp atmosphere for twenty-four hours, and then mix it with sufficient Ether, previously washed with water, to form a soft paste. Set this aside, covered closely, for six hours; then, having quickly enveloped it in a close canvas cloth, express it powerfully between tinned plates, so as to obtain the liquid portion. Reduce the resulting cake to powder, and mix it with sufficient Ether, shaken with one-sixteenth of its bulk of water, to form again a soft paste, and express as before. Mix the liquids, and expose the mixture to spontaneous evaporation until it assumes a syrupy consistence; then spread it on glass or tinned plates, and dry it quickly in a drying closet. Lastly, remove the dry residue from the plates with a spatula, and keep it in a well-stopped bottle.

Tannic Acid, thus obtained, has a yellowish-white colour, and strongly astringent taste. It is decomposed and entirely dissipated when thrown on red-hot iron. It is very soluble in water, and less so in alcohol and ether. Its solution reddens litmus, and produces with solution of gelatin a white, flocculent precipitate, with the salts of sesquioxide of iron a bluish-black precipitate, and

with solutions of the alkaloids white precipitates, very soluble in acetic acid.

ACIDUM VALERIANICUM.

Valerianic Acid.

Take of Valerianate of Soda, in coarse powder,
eight troyounces;
Sulphuric Acid,
Water, each, a sufficient quantity.

To the Valerianate of Soda add, first, three fluidounces of Water, and then three troyounces and a half of Sulphuric Acid. Mix them thoroughly, and from the mixture, after standing, separate the oily acid liquid which rises to the surface. Agitate this repeatedly with small portions of Sulphuric Acid until its specific gravity is reduced below 0.950. Then introduce it into a retort, and distil nearly to dryness; rejecting the distillate so long as it has a specific gravity above 0.940, and keeping the remainder for use.

The rejected portion of the distillate, after agitation with Sulphuric Acid, may be returned to the retort during the progress of the distillation.

Valerianic Acid is a colourless liquid, of an oily consistence, a penetrating disagreeable odour, and caustic taste. Its specific gravity is 0.933. It is soluble in thirty parts of cold water, and, by

agitation with a small quantity of that liquid, takes up about twenty per cent. of its weight, without losing its oily consistence. It mixes in all proportions with alcohol and ether. A solution of Valerianic Acid in fifty parts of hot water, saturated with hydrated carbonate of zinc, yields a liquid which, when filtered, and evaporated to ten parts and cooled, affords white pearly crystals of valerianate of zinc. The mother-water, drained from these crystals, should not yield, by further evaporation and cooling, a salt crystallizing in six-sided tables, and very soluble in water. When the Acid is added to a concentrated solution of acetate of copper, the transparency of the solution is not disturbed.

ACONITIA.

ACONITIA.

Aconitia.

Take of Aconite Root, in moderately fine powder, forty-eight troyounces ;

Diluted Sulphuric Acid a fluidounce
and a half ;

Alcohol,

Stronger Water of Ammonia, .

Stronger Ether,

Distilled Water, each, a sufficient quantity.

Digest the powder in eight pints of Alcohol, in a close vessel, at the temperature of 120°, for twenty-four hours. Introduce the mixture into a

cylindrical percolator, and gradually pour Alcohol upon it until twenty-four pints of liquid have slowly passed. Distil off the alcohol from the filtered liquid until this is reduced to the measure of a pint. Then add to the concentrated liquid a pint of Distilled Water, to which has been added the Diluted Sulphuric Acid, and mix thoroughly. Remove from the liquid the fixed oil and resin which separate on standing, and evaporate it to four fluidounces. When the liquid has cooled, pour it into a glass-stoppered pint bottle, and wash it, by agitation and decantation, with six fluidounces of Stronger Ether, to remove the remainder of the fixed oil and resin. Now add Stronger Water of Ammonia until, after agitation, it remains in slight excess. Next, treat the resulting mixture with six fluidounces of Stronger Ether, and, having closed the bottle, agitate briskly for a few minutes. Allow the liquid to stand until it separates into two layers, the lighter being an ethereal solution of Aconitia. Decant this carefully, and treat what remains, twice successively, with the same quantity of Stronger Ether, decanting each time as before. Mix the several ethereal solutions in a porcelain capsule, and allow the mixture to evaporate spontaneously to dryness.

Lastly, reduce the dry residue to powder, and keep it in a well-stopped bottle.

Aconitia, thus obtained, is a yellowish-white powder, without smell, and of a bitter, acrid taste, accompanied with a sense of numbness. It melts at a moderate heat, and, at a high temperature, is decomposed and entirely dissipated, yielding the smell of ammonia. It requires one hundred and fifty parts of cold and fifty of boiling water for solution, and is readily dissolved by alcohol, ether, and chloroform. It neutralizes acids, forming with them uncrystallizable salts.

ÆTHEREA.

ÆTHER.

Ether.

Take of Stronger Alcohol six pints ;

Sulphuric Acid thirty-six troyounces ;

Potassa three hundred and sixty grains ;

Distilled Water three fluidounces.

To two pints of the Alcohol, contained in a six-pint tubulated retort, gradually add the Acid, stirring constantly during the addition. By means of a cork fitted to the tubulure, adapt a long funnel-shaped tube, with the lower end drawn out so as to form a narrow orifice, and reaching nearly to the bottom of the retort, and also a thermometer tube, graduated from 260° to 300°, with its bulb

reaching to the middle of the liquid. Having placed the retort on a sand-bath, connect it with a Liebig's condenser, and this with a well-cooled receiver. Then raise the heat quickly until the liquid boils, and attains a temperature between 266° and 280° . By means of a flexible tube, connected with the stop-cock of an elevated vessel containing the remainder of the Alcohol, introduce that liquid into the retort, through the funnel-shaped tube, in a continuous stream; the quantity supplied being so regulated, that the temperature of the boiling liquid shall continue between the degrees mentioned. After all the Alcohol has been added, proceed with the distillation until the temperature rises to 286° , when the process should be discontinued. To the distilled liquid add the Potassa, previously dissolved in the Distilled Water, and shake them occasionally together. At the end of twenty-four hours, pour off the supernatant liquid, introduce it into a retort, and, with a gentle heat, distil into a well-cooled receiver three pints, or until the liquid attains the specific gravity 0.750. Lastly, keep the Ether in a well-stopped bottle.

Ether is a very inflammable liquid, having the specific gravity 0.750. It wholly evaporates in the air, and does not redden litmus. When shaken with an equal bulk of water, it loses from one-fifth to one-fourth of its volume.

ÆTHER FORTIOR.

Stronger Ether.

Take of Ether,

Water, each, three pints,

Chloride of Calcium, in fine powder,

Lime, in fine powder, each, a troyounce.

Shake the Ether and the Water thoroughly together, and, when the Water has subsided, separate the supernatant ether. Agitate this well with the Chloride of Calcium and the Lime in a well-stopped bottle, and allow the mixture to stand for twenty-four hours. Then decant the ether into a retort, and, having adapted thereto a Liebig's condenser, distil a pint and a half of Stronger Ether into a receiver refrigerated with ice-cold water. Lastly, keep the liquid in a well-stopped bottle.

By continuing the distillation, a portion of weaker ether may be obtained.

Stronger Ether has a specific gravity not exceeding 0.728. It is extremely inflammable, and does not redden litmus. Shaken with an equal bulk of water, it loses from one-tenth to one-eighth of its volume. It boils actively in a test-tube, half-filled with it and enclosed in the hand, on the addition of small pieces of glass. Half a fluidounce of the liquid, evaporated from a porcelain plate by causing it to flow to and fro over the surface, yields a faintly aromatic odour as the last portions pass off, and leaves the surface without taste or smell, but covered with a deposit of moisture.

CHLOROFORMUM PURIFICATUM.

Purified Chloroform.

Chloroformum, *Pharm.*, 1850.

Take of Commercial Chloroform one hundred
and two troyounces;

Sulphuric Acid seventeen troyounces;

Stronger Alcohol six fluidrachms;

Carbonate of Potassa two troyounces.

Add the Acid to the Chloroform, and shake them together occasionally during twenty-four hours. Separate the lighter liquid from the heavier, and mix it with the Stronger Alcohol. Then add the Carbonate of Potassa, previously heated to redness, and rubbed, while warm, into powder. Agitate the mixture thoroughly, and, by means of a water-bath, distil to dryness from a retort furnished with a condenser. Lastly, keep the distilled liquid in well-stopped bottles.

Purified Chloroform is a colourless, volatile liquid, not inflammable, of a bland ethereal odour, and hot, aromatic, saccharine taste. Its specific gravity varies from 1.490 to 1.494. It boils at 140°. It is slightly soluble in water, and freely so in alcohol and in ether. When mixed with an equal volume of officinal sulphuric acid, in a bottle closed by a glass stopper, no warmth is perceptible to the hand at the moment of mixing; and, when the liquids have been allowed to separate, and to remain in contact for twenty-four hours, no colour is imparted to either, or but a faint yellowish tinge to the acid, which forms the inferior layer. If a small quantity be added to

distilled water, it forms transparent globules under the water, without assuming a milky appearance. When three or four fluidrachms of the liquid are evaporated from a porcelain plate, by causing them to flow to and fro over the surface, the last portions have a slightly aromatic odour, free from pungency and empyreuma; and the plate is left covered with a film of moisture, without odour or taste.

OLEUM ÆTHEREUM.

Ethereal Oil.

Take of Stronger Alcohol two pints;
Sulphuric Acid sixty-one troyounces;
Distilled Water a fluidounce;
Stronger Ether a sufficient quantity.

Add the Acid slowly to the Alcohol, mix them thoroughly, and allow the mixture to stand for twelve hours. Decant the clear liquid from the sediment into a tubulated retort, of such capacity that the mixture shall nearly fill it. Adapt a thermometer tube to the tubulure by means of a cork, so that the bulb shall be deeply immersed in the liquid, and, having attached a Liebig's condenser, distil, by means of a sand-bath, at a temperature between 312° and 322° , until the liquid ceases to come over, or until a black froth begins to arise in the retort. Separate the yellow ethereal liquid from the distillate, and expose it for twenty-four hours, in a shallow capsule, to evaporate spon-

taneously. Then transfer the remaining liquid to a wet filter; and, when the watery portion has drained off, wash the oil which is left, while on the filter, with the Distilled Water. When this also has drained off, transfer the oil to a graduated measure, by perforating the point of the filter, and add to it an equal volume of Stronger Ether.

The Ethereal Oil, obtained by this formula, measures about six fluidrachms.

Ethereal Oil, thus prepared, is a transparent, nearly colourless, volatile liquid, of a peculiar, aromatic, ethereal odour, and sharp, bitter taste. It is neutral to litmus paper not previously moistened, and has the specific gravity 0.91.

ALOE.

ALOE PURIFICATA.

Purified Aloes.

Take of Socotrine Aloes twenty-four troyounces;
Stronger Alcohol four fluidounces.

Heat the Aloes, by means of a water-bath, until it is completely melted. Then add the Alcohol, and, having stirred the mixture thoroughly, strain it through a fine sieve, which has just been dipped into boiling water. Evaporate the strained mixture by means of a water-bath, constantly stirring,

until a thread of the liquid becomes brittle on cooling. Lastly, break the product when cold into pieces of a convenient size, and keep it in a well-stopped bottle.

Purified Aloes is in brittle pieces, of a dull-brown or reddish-brown colour, and having the peculiar aromatic odour of Socotrine Aloes. When powdered, and subjected to the action of alcohol, it is dissolved with the exception of a slight residue.

ALUMINIUM.

ALUMEN EXSICCATUM.

Dried Alum.

Take of Alum, in coarse powder, four troyounces.

Expose it, in a suitable vessel, to a temperature not exceeding 450° until the residue weighs two troyounces and one hundred and twenty grains; then reduce it when cold to fine powder.

ALUMINÆ SULPHAS.

Sulphate of Alumina.

Take of Sulphate of Alumina and Ammonia,
Carbonate of Soda, each, four troy-
ounces;
Sulphuric Acid a troyounce and one
hundred and fifty grains;
Water a sufficient quantity.

Dissolve the salts separately, each in six fluid-ounces of boiling Water, and pour the solution of the Sulphate gradually into that of the Carbonate; then digest with a gentle heat until the evolution of carbonic acid ceases. Collect upon a filter the precipitate formed, and wash it with water until the washings are no longer affected by chloride of barium. Next, with the aid of heat, dissolve the precipitate in the Sulphuric Acid, previously diluted with half a pint of Water, and, having filtered the solution, evaporate it until a pellicle begins to form. Then remove it to a water-bath, and continue the evaporation, with constant stirring, until a dry salt remains. Lastly, preserve this in a well-stopped bottle.

AMMONIA.

AMMONIÆ VALERIANAS.

Valerianate of Ammonia.

Take of Valerianic Acid four fluidounces.

From a mixture, placed in a suitable vessel, of Muriate of Ammonia, in coarse powder, and an equal weight of Lime, previously slaked and in powder, obtain gaseous ammonia, and cause it to pass, first through a bottle filled with pieces of

Lime, and afterwards into the Valerianic Acid, contained in a tall, narrow, glass vessel, until the Acid is neutralized. Then discontinue the process, and set the vessel aside that the Valerianate of Ammonia may crystallize. Lastly, break the salt into pieces, drain it in a glass funnel, dry it on bibulous paper, and keep it in a well-stopped bottle.

Valerianate of Ammonia is a white salt in the form of quadrangular plates, having the disagreeable odour of valerianic acid, and a sharp, sweetish taste. It deliquesces in a moist air, but effloresces in a dry one, and is very soluble in water and in alcohol. It is decomposed by potassa with evolution of ammonia, and by the mineral acids with separation of the valerianic acid, which rises to the surface in the form of an oil.

ANTIMONIUM.

ANTIMONII ET POTASSÆ TARTRAS.

Tartrate of Antimony and Potassa.

Tartar Emetic.

Take of Oxide of Antimony, in very fine powder,
two troyounces ;

Bitartrate of Potassa, in very fine powder,
two troyounces and a half ;

Distilled Water eighteen fluidounces.

To the Water, heated to the boiling point in a

glass vessel, add the powders, previously mixed, and boil for an hour; then filter the liquid while hot, and set it aside that crystals may form. Lastly, dry the crystals, and keep them in a well-stopped bottle.

By further evaporation the mother-water may be made to yield more crystals, which should be purified by a second crystallization.

This salt is in transparent crystals, which become white and opaque on exposure to the air. It is wholly soluble in twenty parts of water. The solution yields no precipitate with chloride of barium, or, if very dilute, with nitrate of silver. Hydrosulphuric acid gas causes an orange-red precipitate. A solution, containing one part in forty of water, is not disturbed by an equal volume of a solution of eight parts of acetate of lead in thirty-two of water and fifteen of acetic acid.

ANTIMONII OXIDUM.

Oxide of Antimony.

Take of Sulphuret of Antimony, in very fine powder, four troyounces;
Muriatic Acid eighteen troyounces;
Nitric Acid a troyounce and one hundred and twenty grains;
Water of Ammonia a fluidounce and a half;
Water,
Distilled Water, each, a sufficient quantity.

Introduce the Sulphuret into a flask, of the capacity of two pints, and, having added the Muriatic Acid, digest, by means of a sand-bath, until effervescence ceases. Then, having removed the flask from the sand-bath, add the Nitric Acid gradually; and, when nitrous acid vapours cease to be given off, and the liquid has grown cold, add to it half a pint of Water, and filter. Pour the filtered liquid gradually into twelve pints of Water, constantly stirring, and allow the precipitate to subside. Decant the supernatant liquid, and wash the precipitate twice by decantation, using, each time, eight pints of Water. Then transfer it to a muslin filter to drain, and, after the draining is completed, wash it with Water until the washings cease to have an acid reaction. Next introduce it into a suitable vessel, and subject it to the action of the Water of Ammonia for two hours; at the end of which time, transfer it to a moistened muslin filter, and wash it with Distilled Water as long as the washings produce a precipitate with nitrate of silver. Lastly, dry the precipitate upon bibulous paper with the aid of a gentle heat.

Oxide of Antimony is a grayish-white powder, insoluble in water, but readily and wholly soluble in muriatic and tartaric acids. It fuses at a dull-red heat, forming a yellowish liquid, which concretes, on cooling, into a crystalline mass of a pearl-colour. Its solution

in tartaric acid in excess gives no precipitate with nitrate of silver, or with ferrocyanide of potassium.

ANTIMONII OXYSULPHURETUM.

Oxysulphuret of Antimony.

Kermes Mineral.

Take of Sulphuret of Antimony, in very fine powder, a troyounce ;

Carbonate of Soda twenty-three troy-ounces ;

Water sixteen pints.

Dissolve the Carbonate of Soda in the Water previously heated to the boiling point, and, having added the Sulphuret of Antimony, boil for an hour. Then filter rapidly into a warm earthen vessel, cover this closely, and allow the liquid to cool slowly. At the end of twenty-four hours, decant the supernatant liquid, drain the precipitate on a filter, wash it with boiled water previously allowed to become cold, and dry it without heat. Lastly, preserve the powder in a well-stopped bottle, protected from the light.

Oxysulphuret of Antimony is a purplish-brown, tasteless powder, soft and velvety to the touch, wholly and readily soluble in muriatic acid with evolution of hydrosulphuric acid gas, and partly soluble in a hot solution of potassa, leaving a residue soluble in tartaric acid.

ANTIMONIUM SULPHURATUM.

Sulphurated Antimony.

Antimonii Sulphuretum Præcipitatum, *Pharm.*, 1850.

Take of Sulphuret of Antimony, in very fine powder, six troyounces ;
Solution of Potassa four pints ;
Distilled Water,
Diluted Sulphuric Acid, each, a sufficient quantity.

Mix the Sulphuret of Antimony with the Solution of Potassa and twelve pints of Distilled Water, and boil the mixture over a gentle fire for two hours, constantly stirring, and occasionally adding Distilled Water so as to preserve the same measure. Strain the liquid immediately through a double muslin strainer, and drop into it, while yet hot, Diluted Sulphuric Acid so long as it produces a precipitate. Then wash the precipitate with hot water to remove the sulphate of potassa, dry it, and rub it into a fine powder.

Sulphurated Antimony is a reddish-brown powder, insoluble in water. When treated with twelve times its weight of officinal muriatic acid, with the aid of heat, it is nearly all dissolved, with effervescence of hydrosulphuric acid. The residue, after having been washed and dried, burns with the characters of sulphur, and leaves a scanty ash. The solution in muriatic acid, when added to water, deposits a white powder. The liquid filtered from this powder yields

an orange-red precipitate with hydrosulphate of ammonia. Water in which the preparation has been boiled should not yield a white precipitate with chloride of barium, or with oxalate of ammonia.

A Q U Æ.

AQUA ACIDI CARBONICI.

Carbonic Acid Water.

By means of a proper apparatus, impregnate Water, contained in a suitable receiver, with a quantity of carbonic acid, equal to five times the bulk of the Water.

Carbonic acid may be obtained from Bicarbonate of Soda or from Marble by means of dilute sulphuric acid.

Carbonic Acid Water is not discoloured by hydrosulphuric acid or solution of ammonia, and yields no precipitate with sulphate of soda, or with ferrocyanide of potassium.

AQUA AMMONIÆ.

Water of Ammonia.

Liquor Ammoniæ, *Pharm.*, 1850.

Solution of Ammonia.

Take of Muriate of Ammonia, in small pieces,
Lime, each, twelve troyounces;
Water six pints;
Distilled Water a sufficient quantity.

Pour a pint of the Water upon the Lime, in a convenient vessel; and, after it has slaked, stir the mixture so as to bring it to the consistence of a smooth paste. Then add the remainder of the Water, and mix the whole thoroughly together. Decant the milky liquid from the gritty sediment into a glass retort, of the capacity of sixteen pints, and add the Muriate of Ammonia. Place the retort on a sand-bath, and adapt to it a receiver, previously connected with a two-pint bottle, containing a pint of Distilled Water, by means of a glass tube, reaching nearly to the bottom of the bottle. Surround the bottle with ice-cold water; and apply heat, gradually increased, until ammonia ceases to come over. Remove the liquid from the bottle, and add to it sufficient Distilled Water to raise its specific gravity to 0.960. Lastly, keep the liquid in small bottles, well stopped.

Water of Ammonia is a transparent, colourless liquid, having a very pungent odour, quite free from empyreuma. Its specific gravity is 0.960, and one hundred grains of it saturate thirty grains of officinal sulphuric acid. With a slight excess of nitric acid it remains transparent and colourless; and with nitrate of silver or chloride of barium it affords no precipitate.

AQUA AMYGDALÆ AMARÆ.

Bitter Almond Water.

Take of Oil of Bitter Almond sixteen minims ;
Carbonate of Magnesia sixty grains ;
Distilled Water two pints.

Rub the Oil, first with the Carbonate of Magnesia, then with the Water, gradually added, and filter through paper.

AQUA AURANTII FLORUM.

Orange Flower Water.

Take of Orange Flowers forty-eight troyounces ;
Water sixteen pints.
Mix them, and distil eight pints.

AQUA CAMPHORÆ.

Camphor Water.

Take of Camphor one hundred and twenty grains ;
Alcohol forty minims ;
Carbonate of Magnesia half a troy-ounce ;
Distilled Water two pints.

Rub the Camphor, first with the Alcohol, then with the Carbonate of Magnesia, and lastly with the Water, gradually added ; then filter through paper.

AQUA CHLORINII.

Chlorine Water.

Take of Black Oxide of Manganese, in fine powder, half a troyounce ;

Muriatic Acid three troyounces ;

Water four fluidounces ;

Distilled Water twenty fluidounces.

Introduce the Oxide into a flask, add the Acid previously diluted with two fluidounces of the Water, and apply a gentle heat. Conduct the generated chlorine, by suitable tubes, through the remainder of the Water contained in a small intermediate vessel, to the bottom of a four-pint bottle containing the Distilled Water, and loosely stopped with cotton. When the air has been entirely displaced by the gas, disconnect the bottle from the apparatus, and, having inserted the stopper, agitate the contents, loosening the stopper from time to time, until the gas ceases to be absorbed. Lastly, pour the Chlorine Water into a bottle, of just sufficient capacity to hold it, stop it securely, and keep it in a cool place, protected from the light.

Chlorine Water is a greenish-yellow liquid, possessing the suffocating odour of chlorine. When a fluidounce of it is mixed with a solution of ten grains of pure sulphate of protoxide of iron in two fluidrachms of water, the mixture does not produce a blue precipitate with ferriecyanide of potassium (red prussiate of potassa).

AQUA CINNAMOMI.

Cinnamon Water.

Take of Oil of Cinnamon half a fluidrachm ;
Carbonate of Magnesia sixty grains ;
Distilled Water two pints.

Rub the Oil, first with the Carbonate of Magnesia, then with the Water, gradually added, and filter through paper.

Cinnamon Water may also be prepared by mixing eighteen troyounces of Cinnamon, in coarse powder, with sixteen pints of Water, and distilling eight pints.

AQUA CREASOTI.

Creasote Water.

Take of Creasote a fluidrachm ;
Distilled Water a pint.

Mix them, and agitate the mixture until the Creasote is dissolved.

AQUA DESTILLATA.

Distilled Water.

Take of Water eighty pints.

Distil two pints, using a tin or glass condenser, and throw them away; then distil sixty-four pints, and keep them in glass bottles.

Distilled Water is colourless and inodorous, and when evaporated leaves no residue. It is not affected by lime-water, hydrosulphuric acid, chloride of barium, nitrate of silver, or oxalate of ammonia.

AQUA FENICULI.

Fennel Water.

Take of Oil of Fennel half a fluidrachm ;
Carbonate of Magnesia sixty grains ;
Distilled Water two pints.

Rub the Oil, first with the Carbonate of Magnesia, then with the Water, gradually added, and filter through paper.

Fennel Water may also be prepared by mixing eighteen troyounces of Fennel, in coarse powder, with sixteen pints of Water, and distilling eight pints.

AQUA MENTHÆ PIPERITÆ.

Peppermint Water.

Take of Oil of Peppermint half a fluidrachm ;
Carbonate of Magnesia sixty grains ;
Distilled Water two pints.

Rub the Oil, first with the Carbonate of Magnesia, then with the Water, gradually added, and filter through paper.

Peppermint Water may also be prepared by mixing eighteen troyounces of Peppermint with sixteen pints of Water, and distilling eight pints.

AQUA MENTHÆ VIRIDIS.

Spearmint Water.

Take of Oil of Spearmint half a fluidrachm;
Carbonate of Magnesia sixty grains;
Distilled Water two pints.

Rub the Oil, first with the Carbonate of Magnesia, then with the Water, gradually added, and filter through paper.

Spearmint Water may also be prepared by mixing eighteen troyounces of Spearmint with sixteen pints of Water, and distilling eight pints.

AQUA ROSÆ.

Rose Water.

Take of Pale Rose forty-eight troyounces;
Water sixteen pints.

Mix them, and distil eight pints.

When it is desirable to keep the Rose for some time before distilling, it may be preserved by being well mixed with half its weight of chloride of sodium.

A R G E N T U M.

ARGENTI CYANIDUM.

Cyanide of Silver.

Argenti Cyanuretum, *Pharm.*, 1850.

Take of Nitrate of Silver,

Ferrocyanide of Potassium, each, two
troyounces ;

Sulphuric Acid a troyounce and a half ;

Distilled Water a sufficient quantity.

Dissolve the Nitrate of Silver in a pint of Distilled Water, and pour the solution into a tubulated glass receiver. Dissolve the Ferrocyanide of Potassium in ten fluidounces of Distilled Water, and pour the solution into a tubulated retort, previously adapted to the receiver. Having mixed the Sulphuric Acid with four fluidounces of Distilled Water, add the mixture to the solution in the retort, and distil, by means of a sand-bath, with a moderate heat, until six fluidounces have passed over, or until the distillate no longer produces a precipitate in the receiver. Lastly, wash the precipitate with Distilled Water, and dry it.

Cyanide of Silver is a white powder, insoluble in water and in cold nitric acid, but soluble in that acid at the boiling temperature. When it is exposed to heat, cyanogen is given off, and metallic silver left.

ARGENTI NITRAS.

Nitrate of Silver.

Take of Silver, in small pieces, two troyounces ;
Nitric Acid two troyounces and a
half ;

Distilled Water a sufficient quantity.

Mix the Acid with a fluidounce of Distilled Water in a porcelain capsule, add the Silver to the mixture, cover it with an inverted glass funnel, resting within the edge of the capsule, and apply a gentle heat until the metal is dissolved, and red vapours cease to be produced ; then remove the funnel, and, increasing the heat, evaporate the solution to dryness. Melt the dry mass, and continue the heat, stirring constantly with a glass rod, until free nitric acid is entirely dissipated. Dissolve the melted salt, when cold, in six fluidounces of Distilled Water, allow the insoluble matter to subside, and decant the clear solution. Mix the residue with a fluidounce of Distilled Water, filter through paper, and, having added the filtrate to the decanted solution, evaporate the liquid until a pellicle begins to form, and set it aside in a warm place to crystallize. Lastly, drain the crystals in a glass funnel until dry, and preserve them in a well-stopped bottle.

By evaporating the mother-water, more crystals may be obtained.

Nitrate of Silver is a heavy, colourless, anhydrous salt, wholly soluble in distilled water, and crystallizing in shining plates. Its solution, treated with muriatic acid in excess, yields a white precipitate, wholly soluble in ammonia; and the liquid, filtered from the precipitate, is not coloured by hydrosulphuric acid, and, when evaporated, leaves no residue.

ARGENTI NITRAS FUSA.

Fused Nitrate of Silver.

Argenti Nitras Fusus, *Pharm.*, 1850.

Take of Nitrate of Silver a convenient quantity.

Melt it in a porcelain capsule, and continue the heat cautiously until frothing ceases; then pour the melted salt into suitable silver moulds.

A small portion of Fused Nitrate of Silver, rubbed into fine powder with twice its weight of sugar, forms a mixture, which, when burned upon a surface of glass or porcelain, leaves a tasteless residue. When treated with muriatic acid, as directed in the note to Nitrate of Silver, the liquid, filtered from the precipitate formed, is totally evaporated by heat.

ARGENTI OXIDUM.

Oxide of Silver.

Take of Nitrate of Silver four troyounces;

Distilled Water half a pint;

Solution of Potassa a pint and a half,
or a sufficient quantity.

Dissolve the Nitrate of Silver in the Water, and to the solution add Solution of Potassa so long as it produces a precipitate. Wash this repeatedly with water until the washings are nearly tasteless. Lastly, dry the precipitate, and keep it in a well-stopped bottle, protected from the light.

Oxide of Silver is an olive-brown powder, very slightly soluble in water. Exposed to heat it gives out oxygen, and metallic silver is left. When it is dissolved in nitric acid, and the solution is precipitated by chloride of sodium in excess, the supernatant liquid is not discoloured by hydrosulphate of ammonia.

ARSENICUM.

ARSENICI IODIDUM.

Iodide of Arsenic.

Take of Arsenic sixty grains;

Iodine three hundred grains.

Rub the Arsenic in a mortar until reduced to a fine powder; then add the Iodine, and rub them together until they are thoroughly mixed. Put the mixture into a small flask or a test-tube, loosely stopped, and heat it very gently until liquefaction occurs. Then incline the vessel in different directions, in order that any portion of the Iodine, which may have condensed on its

surface, may be returned into the melted mass. Lastly, pour the melted Iodide on a porcelain slab, and, when it is cold, break it into pieces, and keep it in a well-stopped bottle.

Iodide of Arsenic is an orange-red, crystalline solid, entirely soluble in water, and wholly volatilized by heat.

ATROPIA.

ATROPIA.

Atropia.

Take of Belladonna Root, in fine powder, forty-eight troyounces ;

Purified Chloroform four troyounces
and a half ;

Diluted Sulphuric Acid,

Solution of Potassa,

Alcohol,

Water, each, a sufficient quantity.

Mix the powder with a pint of Alcohol, and, having introduced the mixture into a cylindrical percolator, pour Alcohol gradually upon it until sixteen pints have passed. From the liquid, thus obtained, distil off twelve pints of alcohol. To the residue add sufficient Diluted Sulphuric Acid to

give it an acid reaction, and, having evaporated the liquid to half a pint, add an equal bulk of Water, and filter through paper. To the filtered liquid add, first a troyounce and a half of the Chloroform, and then Solution of Potassa in slight excess, and shake the whole together, at intervals, for half an hour. When the heavier liquid has subsided, separate it, and, having added a troyounce and a half of the Chloroform to the lighter liquid, again shake them together, and separate the heavier from the lighter liquid as before. Add to this lighter liquid the remainder of the Chloroform, and, after agitation, separate the heavier liquid for the third time. Mix the heavier liquids in a capsule, and set the mixture aside until, by spontaneous evaporation, the Atropia is left dry.

Atropia, thus prepared, is in yellowish-white, silky, prismatic crystals, without smell, but having a bitter and acrid taste. When heated it first melts, and afterwards, on increasing the heat, is partly volatilized unchanged. It is soluble in three hundred parts of water at 60°, in twenty-five parts of ether, and in much less alcohol. It has a strong alkaline reaction, and forms crystallizable salts with acids. Atropia and its salts are decomposed and rendered inert by prolonged contact with caustic potassa, and, if heated with that alkali, evolve ammonia. When applied in weak solution, they powerfully dilate the pupil of the eye.

ATROPIÆ SULPHAS.

Sulphate of Atropia.

Take of Atropia sixty grains ;

Stronger Ether four fluidounces and a half ;

Sulphuric Acid six grains ;

Stronger Alcohol a fluidrachm.

Dissolve the Atropia in the Ether ; then mix the Acid and Alcohol, and add the mixture, drop by drop, to the ethereal solution until the Atropia is saturated. Allow the liquid to stand until the precipitate formed is deposited. Then decant the ether, and expose the residue to spontaneous evaporation until the salt is left dry.

Sulphate of Atropia is a white, slightly crystalline powder, very soluble in water and in alcohol, insoluble in ether, and wholly dissipated by heat. It is neutral to litmus, and gives a white precipitate with chloride of barium.

B A R I U M.

BARI CHLORIDUM.*Chloride of Barium.*

Take of Carbonate of Baryta, in small pieces,

Muriatic Acid, each, four troyounces ;

Water a pint.

Mix the Acid with the Water, and gradually add the Carbonate of Baryta. Towards the close of the effervescence apply a gentle heat, and, when chemical action has ceased, filter the liquid, and evaporate so that crystals may form when it cools.

Chloride of Barium is wholly soluble in water. Its solution is not affected by ammonia or hydrosulphuric acid. When sulphuric acid is added in excess, no further precipitate is produced by the addition of carbonate of soda.

B I S M U T H U M.

BISMUTHI SUBCARBONAS.

Subcarbonate of Bismuth.

Take of Bismuth, in pieces, two troyounces ;
Nitric Acid eight troyounces and a half ;
Water of Ammonia five fluidounces ;
Carbonate of Soda ten troyounces ;
Distilled Water a sufficient quantity.

Mix four troyounces and a half of the Nitric Acid with four fluidounces of Distilled Water in a capacious glass vessel, and, having added the Bismuth, set the whole aside for twenty-four hours. Dilute the resulting solution with ten fluidounces of Distilled Water, stir it thoroughly, and, after twenty-four hours, filter through paper. To the filtered liquid, previously diluted with four pints

of Distilled Water, slowly add the Water of Ammonia, with constant stirring. Transfer the whole to a strainer, and, after the precipitate has been drained, wash it with two pints of Distilled Water, drain it again, and press out as much of the liquid as possible. Then place the precipitate in a proper vessel, add the remainder of the Nitric Acid, and heat nearly to the boiling point. When the solution has become cold, slowly add to it Distilled Water, with constant stirring, until the further addition of this liquid begins to produce a permanent milkiness. Then set the solution aside, and, at the end of twenty-four hours, filter through paper.

Dissolve the Carbonate of Soda in twenty fluid-ounces of Distilled Water, with the aid of heat, and filter the solution through paper. To this, when cold, slowly add the solution of nitrate of bismuth, with constant stirring. Transfer the whole to a strainer, and, after the precipitate has been drained, wash it with Distilled Water until the washings pass tasteless. Lastly, press the precipitate so as to free it as far as possible from water, dry it on bibulous paper with a gentle heat, and rub it into powder.

Subcarbonate of Bismuth is a white or yellowish-white powder, without taste or smell, insoluble in water, but soluble, with effervescence, in dilute nitric acid. Upon being heated to redness, it loses nine and a half per cent. of its weight. When mixed with

dilute sulphuric acid in excess, and subjected to Marsh's test, it yields no arsenic, or merely a trace.

BISMUTHI SUBNITRAS.

Subnitrate of Bismuth.

Take of Bismuth, in pieces, two troyounces;

Nitric Acid,

Carbonate of Soda, each, ten troy-
ounces;

Water of Ammonia six fluidounces;

Distilled Water a sufficient quantity.

Mix four troyounces and a half of the Nitric Acid with four fluidounces of Distilled Water, in a capacious glass vessel, and, having added the Bismuth, set the whole aside for twenty-four hours. Dilute the resulting solution with ten fluidounces of Distilled Water, stir it thoroughly, and, at the end of twenty-four hours, filter through paper.

Dissolve the Carbonate of Soda in twenty fluidounces of Distilled Water with the aid of heat, and filter the solution through paper. To this, when cold, slowly add the solution of nitrate of bismuth, with constant stirring. Transfer the whole to a strainer, and, after the precipitate has been drained, wash it with Distilled Water until

the washings pass tasteless, and drain again as completely as possible. Then place the moist precipitate in a capacious vessel, gradually add the remainder of the Nitric Acid, and heat nearly to the boiling point. When the solution has become cold, slowly add to it Distilled Water, with constant stirring, until the further addition of this liquid begins to produce a permanent milkiness. Then set the solution aside, and, at the end of twenty-four hours, filter through paper. To the filtered liquid, previously diluted with four pints of Distilled Water, slowly add the Water of Ammonia, with constant stirring. Transfer the whole to a strainer, and, after the precipitate has been drained, wash it with two pints of Distilled Water, drain it again, and press out as much of the liquid as possible. Lastly, dry it upon bibulous paper with a gentle heat, and rub it into powder.

Subnitrate of Bismuth is a heavy, white powder, of a somewhat satiny appearance. It has a faintly acid odour and taste, and, when moistened on litmus paper, a decidedly acid reaction. It is entirely soluble, without effervescence, in nitric acid, and the solution yields no precipitate with dilute sulphuric acid. Upon being heated to redness it loses twenty per cent. of its weight. When mixed with dilute sulphuric acid in excess, and subjected to Marsh's test, it yields no arsenic, or merely a trace.

C A D M I U M.

CADMIUM SULPHAS.

Sulphate of Cadmium.

Take of Cadmium, in small pieces, a troyounce;
Nitric Acid two troyounces;
Carbonate of Soda three troyounces;
Sulphuric Acid four hundred and twenty
grains;
Distilled Water a sufficient quantity.

To the Cadmium and two fluidounces of Distilled Water, introduced into a glass vessel, add by degrees the Nitric Acid, and, when the action slackens, apply a gentle heat until the metal is dissolved. Filter the solution, and, having dissolved the Carbonate of Soda in six fluidounces of Distilled Water, mix the solutions thoroughly. Wash the precipitate obtained until the water passes tasteless, and dissolve it in the Sulphuric Acid, diluted with four fluidounces of Distilled Water. Then evaporate the solution to one-third, and set it aside to crystallize. Lastly, dry the crystals on bibulous paper.

Sulphate of Cadmium is in colourless, prismatic crystals, efflorescent in the air, and very soluble in water. Its solution, even when

rendered decidedly acid, yields, on the addition of hydrosulphate of ammonia, a yellow precipitate, insoluble in an excess of the precipitant.

CALCIUM.

CALCIS CARBONAS PRÆCIPITATA.

Precipitated Carbonate of Lime.

Calcis Carbonas Præcipitatus, *Pharm.*, 1850.

Take of Solution of Chloride of Calcium five pints and a half;

Carbonate of Soda seventy-two troy-ounces;

Distilled Water a sufficient quantity.

Dissolve the Carbonate of Soda in six pints of Distilled Water. Heat this solution and the Solution of Chloride of Calcium, separately, to the boiling point, and mix them. After the precipitate has subsided, separate it from the supernatant liquid by decantation, and wash it with boiling Distilled Water until the washings cease to be affected by a solution of nitrate of silver. Lastly, dry the precipitate on bibulous paper.

Precipitated Carbonate of Lime is a very fine, white powder, free from grittiness, insoluble in water, but wholly soluble in dilute muriatic acid, with copious effervescence of carbonic acid gas.

CALCIS PHOSPHAS PRÆCIPITATA.

Precipitated Phosphate of Lime.

Take of Bone, calcined to whiteness, and in fine powder, four troyounces ;

Muriatic Acid eight troyounces ;

Water of Ammonia twelve fluidounces,
or a sufficient quantity ;

Distilled Water a sufficient quantity.

Macerate the Bone with the Acid, diluted with a pint of Distilled Water, until it is dissolved, and filter the solution. Add another pint of Distilled Water, and then, gradually, Water of Ammonia until the liquid acquires an alkaline reaction. Mix the precipitate obtained, while yet in the state of magma, with twice its bulk of boiling Distilled Water, and pour the whole upon a strainer. Wash the precipitate with boiling Distilled Water until the washings cease to be affected by a solution of nitrate of silver, acidulated with nitric acid. Lastly, dry the precipitate with a gentle heat.

Precipitated Phosphate of Lime is a white powder, inodorous and tasteless, fusible without decomposition by an intense heat, insoluble in water, but freely soluble in nitric, muriatic, and acetic acids. Its solution in dilute nitric acid yields a white precipitate with oxalate of ammonia ; and the same solution, neutralized as far as possible without causing precipitation, gives a lemon-yellow precipitate with solution of ammonio-nitrate of silver.

CRETA PRÆPARATA.

Prepared Chalk.

Take of Chalk a convenient quantity.

Add a little water to the Chalk, and rub it into fine powder. Throw this into a large vessel nearly full of water, stir briskly, and, after a short interval, decant the supernatant liquid, while yet turbid, into another vessel. Treat the coarser particles of Chalk, remaining in the first vessel, in a similar manner, and add the turbid liquid to that previously decanted. Lastly, set the liquid by that the powder may subside, and, having poured off the water, dry the powder.

TESTA PRÆPARATA.

Prepared Oyster-shell.

Take of Oyster-shell a convenient quantity.

Free the Oyster-shell from extraneous matter, wash it with boiling water, and, having reduced it to a fine powder, treat this in the manner directed for Prepared Chalk.

C A R B O.

CARBO ANIMALIS PURIFICATUS.

Purified Animal Charcoal.

Take of Animal Charcoal, in fine powder,
Muriatic Acid, each, twelve troyounces;
Water twelve fluidounces.

Pour the Muriatic Acid, previously mixed with the Water, gradually upon the Charcoal, and digest with a gentle heat for two days, occasionally stirring the mixture. Having allowed the undissolved portion to subside, pour off the supernatant liquid, wash the Charcoal frequently with water until the washings cease to afford a precipitate with nitrate of silver, and dry it.

Purified Animal Charcoal does not effervesce on the addition of muriatic acid; nor does it impart to the acid anything capable of yielding a precipitate with ammonia or its carbonate.

C E R A T A.

CERATUM ADIPIS.

Cerate of Lard.

Ceratum Simplex, *Pharm.*, 1850.

Take of Lard eight troyounces;
White Wax four troyounces.

Melt them together, and stir the mixture constantly until cool.

CERATUM CANTHARIDIS.

Cerate of Cantharides.

Blistering Cerate.

Take of Cantharides, in very fine powder, twelve troyounces ;

Yellow Wax,

Resin, each, seven troyounces ;

Lard ten troyounces.

To the Wax, Resin, and Lard, previously melted together, and strained through muslin, add the Cantharides, and, by means of a water-bath, keep the mixture in a liquid state for half an hour, stirring occasionally. Then remove it from the water-bath, and stir it constantly until cool.

CERATUM CETACEI.

Cerate of Spermaceti.

Take of Spermaceti a troyounce ;

White Wax three troyounces ;

Olive Oil five troyounces.

Melt together the Spermaceti and Wax ; then add the Oil previously heated, and stir the mixture constantly until cool.

CERATUM EXTRACTI CANTHARIDIS.

Cerate of Extract of Cantharides.

Take of Cantharides, in fine powder, five troy-
ounces;

Stronger Alcohol two pints and a half,
or a sufficient quantity;

Resin three troyounces;

Yellow Wax six troyounces;

Lard seven troyounces.

Moisten the Cantharides with Stronger Alcohol, pack them in a cylindrical percolator, and gradually pour on Stronger Alcohol, until the liquid passes nearly colourless. Evaporate the filtered liquid, by means of a water-bath, to the consistence of a soft extract. Mix this with the Resin, Wax, and Lard, previously melted together, and keep the whole at the temperature of 212° for fifteen minutes. Lastly, strain the mixture through muslin, and stir it constantly until cool.

CERATUM PLUMBI SUBACETATIS.

*Cerate of Subacetate of Lead.**Goulard's Cerate.*

Take of Solution of Subacetate of Lead two
fluidounces and a half;

White Wax four troyounces;

Olive Oil eight troyounces ;
Camphor thirty grains.

Mix the Wax, previously melted, with seven troyounces of the Oil. Then remove the mixture from the fire, and, when it begins to thicken, gradually pour in the Solution of Subacetate of Lead, stirring constantly with a wooden spatula until it becomes cool. Lastly, add the Camphor dissolved in the remainder of the Oil, and mix them.

CERATUM RESINÆ.

Resin Cerate.

Basilicon Ointment.

Take of Resin ten troyounces ;
Yellow Wax four troyounces ;
Lard sixteen troyounces.

Melt them together, strain the mixture through muslin, and stir it constantly until cool.

CERATUM RESINÆ COMPOSITUM.

Compound Resin Cerate.

Take of Resin,
Suet,
Yellow Wax, each, twelve troyounces ;
Turpentine six troyounces ;
Flaxseed Oil seven troyounces.

Melt them together, strain the mixture through muslin, and stir it constantly until cool.

CERATUM SABINÆ.

Cerate of Savine.

Take of Savine, in fine powder, three troyounces;
Resin Cerate twelve troyounces;
Ether a sufficient quantity.

Moisten the Savine with Ether, pack it firmly in a cylindrical percolator, and pour on Ether until the filtered liquid passes nearly colourless. Evaporate this spontaneously to the consistence of syrup, add the concentrated liquid to the Resin Cerate, softened by a gentle heat, and mix them thoroughly.

CERATUM SAPONIS.

Soap Cerate.

Take of Soap Plaster two troyounces;
White Wax two troyounces and a half;
Olive Oil four troyounces.

Melt together the Plaster and Wax, add the Oil, and, after continuing the heat a short time, stir the mixture until cool.

CERATUM ZINCI CARBONATIS.

Cerate of Carbonate of Zinc.

Take of Precipitated Carbonate of Zinc two troyounces;
Ointment of Lard ten troyounces.
Mix them.

CINCHONIA.

CINCHONIÆ SULPHAS.

Sulphate of Cinchonia.

Take of the mother-water, remaining after the crystallization of Sulphate of Quinia, in the process for preparing that salt, a convenient quantity;

Solution of Soda,

Alcohol,

Diluted Sulphuric Acid,

Animal Charcoal, in fine powder, each,
a sufficient quantity.

To the mother-water add gradually, with constant stirring, Solution of Soda, until the liquid becomes alkaline. Collect on a filter the precipitate formed, wash it with water, and dry it. Then wash it with successive small portions of Alcohol, to remove other alkaloids which may be present. Mix the residue with eight times its weight of water, and, having heated the mixture, add gradually Diluted Sulphuric Acid until it is saturated and becomes clear. Then boil the liquid with Animal Charcoal, filter it while hot, and set it aside to crystallize. Lastly, drain the crystals,

and dry them on bibulous paper. By evaporating the mother-liquid, more crystals may be obtained.

Sulphate of Cinchonia is in white, shining crystals, having the form of short, oblique prisms, with dihedral summits. It melts at 212° , loses its water of crystallization at a somewhat higher temperature, and is dissipated at a red heat. It dissolves in fifty-four parts of cold water, in much less boiling water, in seven parts of alcohol, and very sparingly in ether. Its aqueous solution gives with terchloride of gold a yellow precipitate, and with chloride of calcium a white one. Ammonia, added to its solution in chlorine water, causes a white precipitate. If the salt be rubbed with water of ammonia, and then treated with ether, the cinchonia, separated by the former, will not be dissolved by the latter.

COLLODIUM.

COLLODIUM.

Collodion.

Take of Cotton, freed from impurities, half a troyounce ;

Nitrate of Potassa, in fine powder, ten troyounces ;

Sulphuric Acid fifteen troyounces and a half ;

Stronger Ether twenty-one fluidounces ;

Stronger Alcohol a sufficient quantity.

Add the Sulphuric Acid to the Nitrate of Potassa in a glass or porcelain vessel, and stir them together

until they are uniformly mixed. When the temperature of the mixture is below 122° , add the Cotton, and, by means of stout glass rods, imbue it thoroughly with the mixture. Then cover the vessel closely with a glass or porcelain lid, and allow it to stand for twenty-four hours. Transfer the Cotton to a larger vessel, and wash it, first with cold water until the washings cease to have an acid taste, and then with boiling water. Press it as dry as possible with the hand, pack it tightly in a conical percolator, and pour upon it Stronger Alcohol, until the remaining water is displaced; then again press it as dry as possible with the hand. Mix the Stronger Ether with six fluid-ounces of Stronger Alcohol in a suitable bottle, and, having added the moist Cotton to the mixture, agitate occasionally until it is dissolved. The Cotton, prepared for solution by this formula, and dried at 212° , weighs three hundred and thirty-six grains.

Collodion may also be made by dissolving fifty-six grains of Cotton, prepared as above, and dried at 212° , in a mixture of three fluidounces and a half of Stronger Ether and a fluidounce of Stronger Alcohol.

Collodion is a colourless, opalescent liquid, of a syrupy consistence.

By long standing it deposits a layer of fibrous matter, and becomes more transparent. This layer should be reincorporated, by agitation, before the Collodion is used. When applied it should form a colourless, transparent, flexible, and strongly contractile film.

COLLODIUM CUM CANTHARIDE.

Collodion with Cantharides.

Cantharidal Collodion.

Take of Cantharides, in fine powder, eight troy-ounces ;

Cotton, prepared by the process for Collodion, and dry, one hundred grains ;

Stronger Ether a pint and a half ;

Stronger Alcohol a sufficient quantity.

Introduce the Cantharides into a cylindrical percolator, and, having pressed them firmly, gradually pour on the Ether. When fifteen fluidounces have passed, set aside the liquid in a close vessel, and continue the percolation with Stronger Alcohol until half a pint more of liquid is obtained. Set this in a warm place for spontaneous evaporation, and, when it is reduced to a fluidounce, mix it with the reserved liquid. Then add the Cotton to the mixture, and agitate occasionally until it is dissolved. Lastly, keep the solution in a well-stopped bottle.

CONFECTIONES.

CONFECTIO AROMATICA.

Aromatic Confection.

Take of Aromatic Powder four troyounces;
Clarified Honey four troyounces, or a
sufficient quantity.

Rub the Aromatic Powder with Clarified Honey
until a uniform mass is obtained of the proper con-
sistence.

CONFECTIO AURANTII CORTICIS.

Confection of Orange Peel.

Take of Sweet Orange Peel, recently separated
from the fruit by grating, twelve
troyounces;

Sugar thirty-six troyounces.

Beat the Orange Peel with the Sugar, gradually
added, until they are thoroughly mixed.

CONFECTIO OPII.

Confection of Opium.

Take of Opium, in fine powder, two hundred
and seventy grains;

Aromatic Powder six troyounces;

Clarified Honey fourteen troyounces.

· Rub the Opium with the Aromatic Powder ;
then add the Honey, and beat the whole together
until thoroughly mixed.

CONFECTIO ROSÆ.

Confection of Rose.

Take of Red Rose, in fine powder, four troy-
ounces ;

Sugar, in fine powder, thirty troy-
ounces ;

Clarified Honey six troyounces ;

Rose Water eight fluidounces.

Rub the Rose with the Rose Water heated to
150° ; then gradually add the Sugar and Honey,
and beat the whole together until thoroughly
mixed.

CONFECTIO SENNÆ.

Confection of Senna.

Take of Senna, in fine powder, eight troyounces ;

Coriander, in fine powder, four troy-
ounces ;

Purging Cassia, finely bruised, sixteen
troyounces ;

Tamarind ten troyounces ;

Prune, sliced, seven troyounces ;

Fig, bruised, twelve troyounces ;

Sugar, in coarse powder, thirty troy-ounces ;

Water a sufficient quantity.

Digest, in a close vessel, by means of a water-bath, the Purging Cassia, Tamarind, Prune, and Fig in three pints of Water for three hours. Separate the coarser portions with the hand, and pass the pulpy mass, by rubbing, first through a coarse hair sieve, and then through a fine one, or a muslin cloth. Mix the residue with a pint of Water, and, having digested the mixture for a short time, treat it as before, and add the product to the pulpy liquid first obtained. Then, by means of a water-bath, dissolve the Sugar in the pulpy liquid, and evaporate the whole until it weighs ninety-six troyounces, or until it has been brought to the consistence of honey. Lastly, add the Senna and Coriander, and incorporate them thoroughly with the other ingredients while yet warm.

C U P R U M.

CUPRUM AMMONIATUM.

Ammoniated Copper.

Take of Sulphate of Copper half a troyounce ;

Carbonate of Ammonia three hundred
and sixty grains.

Rub them together in a glass mortar until effervescence ceases. Then wrap the Ammoniated Copper in bibulous paper, dry it with a gentle heat, and keep it in a well-stopped bottle.

DECOCTA.

DECOCTUM CETRARÆ.

Decoction of Iceland Moss.

Take of Iceland Moss half a troyounce ;

Water a sufficient quantity.

Boil the Iceland Moss in a pint of Water for fifteen minutes, strain with compression, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM CHIMAPHILÆ.

Decoction of Pipsissewa.

Take of Pipsissewa, bruised, a troyounce ;

Water a sufficient quantity.

Boil the Pipsissewa in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM CINCHONÆ FLAVÆ.

Decoction of Yellow Cinchona.

Take of Yellow Cinchona, bruised, a troyounce ;
Water a sufficient quantity.

Boil the Yellow Cinchona in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM CINCHONÆ RUBRÆ.

Decoction of Red Cinchona.

Take of Red Cinchona, bruised, a troyounce ;
Water a sufficient quantity.

Boil the Red Cinchona in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM CORNÛS FLORIDÆ.

Decoction of Dogwood.

Take of Dogwood, bruised, a troyounce ;
Water a sufficient quantity.

Boil the Dogwood in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM DULCAMARÆ.

Decoction of Bittersweet.

Take of Bittersweet, bruised, a troyounce ;

Water a sufficient quantity.

Boil the Bittersweet in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM HÆMATOXYLI.

Decoction of Logwood.

Take of Logwood, rasped, a troyounce ;

Water a sufficient quantity.

Boil the Logwood in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM HORDEI.

Decoction of Barley.

Take of Barley two troyounces ;

Water a sufficient quantity.

Having washed away the extraneous matters which adhere to the Barley, boil it with half a pint of Water for a short time, and throw away the resulting liquid. Then, having poured on it four pints of boiling Water, boil down to two pints, and strain.

DECOCTUM QUERCÛS ALBÆ.

Decoction of White-oak Bark.

Take of White-oak Bark, bruised, a troyounce ;
Water a sufficient quantity.

Boil the White-oak Bark in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM SARSAPARILLÆ COMPOSITUM.

Compound Decoction of Sarsaparilla.

Take of Sarsaparilla, sliced and bruised, six troyounces ;

Bark of Sassafras Root, sliced,

Guaiacum Wood, rasped,

Liquorice Root, bruised, each, a troyounce ;

Mezereon, sliced, one hundred and eighty grains ;

Water a sufficient quantity.

Macerate with four pints of Water for twelve hours ; then boil for a quarter of an hour, strain, and add sufficient Water, through the strainer, to make the decoction measure four pints.

DECOCTUM SENEGÆ.

Decoction of Seneka.

Take of Seneka, bruised, a troyounce ;

Water a sufficient quantity.

Boil the Seneka in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

DECOCTUM UVÆ URSI.

Decoction of Uva Ursi.

Take of Uva Ursi a troyounce ;

Water a sufficient quantity.

Boil the Uva Ursi in a pint of Water for fifteen minutes, strain, and add sufficient Water, through the strainer, to make the decoction measure a pint.

EMPLASTRA.

EMPLASTRUM AMMONIACI.

Plaster of Ammoniac.

Take of Ammoniac five troyounces ;

Diluted Acetic Acid half a pint.

Dissolve the Ammoniac in the Diluted Acetic Acid, and strain ; then evaporate the solution by

means of a water-bath, stirring constantly, until it acquires the proper consistence.

EMPLASTRUM AMMONIACI CUM HYDRARGYRO.

Plaster of Ammoniac with Mercury.

Take of Ammoniac twelve troyounces ;
Mercury three troyounces ;
Olive Oil sixty grains ;
Sublimed Sulphur eight grains.

Heat the Oil, and gradually add the Sulphur, stirring constantly until they unite; then add the Mercury, and triturate until globules of the metal cease to be visible. Boil the Ammoniac with sufficient water to cover it, until they are thoroughly mixed; then strain through a hair sieve, and evaporate, by means of a water-bath, until a small portion taken from the vessel hardens on cooling. Lastly, add the Ammoniac, while yet hot, gradually to the mixture of Oil, Sulphur, and Mercury, and thoroughly incorporate all the ingredients.

EMPLASTRUM ANTIMONII.

Plaster of Antimony.

Take of Tartrate of Antimony and Potassa, in fine powder, a troyounce ;
Burgundy Pitch four troyounces.

Melt the Pitch by means of a water-bath, and strain; then add the powder, and stir them well together until the mixture thickens on cooling.

EMPLASTRUM ARNICÆ.

Plaster of Arnica.

Take of Alcoholic Extract of Arnica a troyounce
and a half;

Resin Plaster three troyounces.

Add the Extract to the Plaster, previously melted by means of a water-bath, and mix them.

EMPLASTRUM ASSAFÆTIDÆ.

Plaster of Assafetida.

Take of Assafetida,

Plaster of Lead, each, twelve troy-
ounces;

Galbanum,

Yellow Wax, each, six troyounces;

Alcohol three pints.

Dissolve the Assafetida and Galbanum in the Alcohol by means of a water-bath, strain the liquid while hot, and evaporate to the consistence of honey; then add the Plaster and Wax, previously melted together, stir the mixture well, and evaporate to the proper consistence.

EMPLASTRUM BELLADONNÆ.

Plaster of Belladonna.

Take of Alcoholic Extract of Belladonna a troy-ounce ;

Resin Plaster two troyounces.

Add the Extract to the Plaster, previously melted by means of a water-bath, and mix them.

EMPLASTRUM FERRI.

Plaster of Iron.

Take of Subcarbonate of Iron three troyounces ;

Plaster of Lead twenty-four troyounces ;

Burgundy Pitch six troyounces.

Add the Subcarbonate of Iron to the Plaster and Burgundy Pitch, previously melted together, and stir them constantly until the mixture thickens on cooling.

EMPLASTRUM GALBANI COMPOSITUM.

Compound Plaster of Galbanum.

Take of Galbanum eight troyounces ;

Turpentine a troyounce ;

Burgundy Pitch three troyounces ;

Plaster of Lead thirty-six troyounces.

To the Galbanum and Turpentine, previously melted together and strained, add first the Bur-

gundy Pitch, and afterwards the Plaster, melted over a gentle fire, and mix the whole together.

EMPLASTRUM HYDRARGYRI.

Plaster of Mercury.

Take of Mercury six troyounces ;
Olive Oil,
Resin, each, two troyounces ;
Plaster of Lead twelve troyounces.

Melt the Oil and Resin together, and, when they have become cool, rub the Mercury with them until globules of the metal cease to be visible. Then gradually add the Plaster, previously melted, and mix the whole together.

EMPLASTRUM OPII.

Plaster of Opium.

Take of Extract of Opium a troyounce ;
Burgundy Pitch three troyounces ;
Plaster of Lead twelve troyounces ;
Water a sufficient quantity.

Mix the Extract with three fluidounces of Water, and evaporate, by means of a water-bath, to a fluidounce and a half. Add this to the Burgundy Pitch and Plaster, melted together by means of a water-bath, and continue the heat for

a short time, stirring constantly, that the moisture may be evaporated.

EMPLASTRUM PICIS BURGUNDICÆ.

Plaster of Burgundy Pitch.

Take of Burgundy Pitch seventy-two troyounces;
Yellow Wax six troyounces.

Melt them together, strain, and stir constantly until they thicken on cooling.

EMPLASTRUM PICIS CANADENSIS.

Plaster of Canada Pitch.

Hemlock Pitch Plaster.

Take of Canada Pitch seventy-two troyounces;
Yellow Wax six troyounces.

Melt them together, strain, and stir constantly until they thicken on cooling.

EMPLASTRUM PICIS CUM CANTHARIDE.

Plaster of Pitch with Cantharides.

Take of Burgundy Pitch forty-eight troyounces;
Cerate of Cantharides four troyounces.

Melt them together by means of a water-bath, and stir constantly until the mixture thickens on cooling.

EMPLASTRUM PLUMBI.

Plaster of Lead.

Take of Oxide of Lead, in fine powder, thirty troyounces ;

Olive Oil fifty-six troyounces ;

Water a sufficient quantity.

Sift the Oxide of Lead into the Oil, contained in a suitable vessel, of a capacity equal to twice the bulk of the ingredients. Then add half a pint of boiling Water, and boil the whole together until a plaster is formed ; adding from time to time, during the process, a little boiling Water, as that first added is consumed.

EMPLASTRUM RESINÆ.*Resin Plaster.**Adhesive Plaster.*

Take of Resin, in fine powder, six troyounces ;

Plaster of Lead thirty-six troyounces.

To the Plaster, melted over a gentle fire, add the Resin, and mix them.

EMPLASTRUM SAPONIS.*Soap Plaster.*

Take of Soap, sliced, four troyounces ;

Plaster of Lead thirty-six troyounces ;

Water a sufficient quantity.

Rub the Soap with Water until brought to a semi-liquid state; then mix it with the Plaster, previously melted, and boil to the proper consistence.

EXTRACTA.

In preparing the Extracts, unless otherwise directed, evaporate as quickly as possible, in a broad, shallow vessel, by means of a water-bath, until they have acquired the consistence proper for forming pills; and, towards the end of the process, stir them constantly with a spatula.

Sprinkle upon the softer Extracts a small quantity of Alcohol.

EXTRACTUM ACONITI ALCOHOLICUM.

Alcoholic Extract of Aconite.

Take of Aconite Leaf, recently dried and in fine powder, twelve troyounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Introduce the powder, previously mixed with one-third of the Alcohol, into a conical percolator, and pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the powder, pour on Diluted Alcohol until a pint of

tincture has been obtained. Set this aside in a warm place, and allow it to evaporate spontaneously until reduced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, or until the powder is exhausted; then evaporate, by means of a water-bath, at a temperature not exceeding 160° , to the consistence of syrup, and add the three fluidounces of tincture first obtained. Lastly, continue the evaporation, at a temperature not exceeding 120° , until the whole is reduced to the proper consistence.

EXTRACTUM ARNICÆ ALCOHOLICUM.

Alcoholic Extract of Arnica.

Take of Arnica, in moderately coarse powder,
twenty-four troyounces;

Alcohol four pints;

Water two pints;

Diluted Alcohol a sufficient quantity.

Mix the Alcohol and Water, and moisten the powder with a pint of the mixture; then pack it firmly in a cylindrical percolator, and gradually pour on the remainder of the mixture. Continue the percolation with Diluted Alcohol until six pints of tincture have passed. Lastly, evaporate

this, by means of a water-bath, to the proper consistence.

EXTRACTUM BELLADONNÆ.

Extract of Belladonna.

Take of Belladonna Leaf, fresh, twelve troy-ounces.

Bruise the Leaf in a stone mortar, sprinkling on it a little water, and express the juice; then, having heated this to the boiling point, strain, and evaporate to the proper consistence.

EXTRACTUM BELLADONNÆ ALCOHOLICUM.

Alcoholic Extract of Belladonna.

Take of Belladonna Leaf, in fine powder, twenty-four troyounces;

Alcohol four pints;

Water two pints;

Diluted Alcohol a sufficient quantity.

Mix the Alcohol and Water, and moisten the powder with a pint of the mixture; then pack it firmly in a conical percolator, and gradually pour upon it the remainder of the mixture. Continue the percolation with Diluted Alcohol until six pints of tincture have passed. Lastly, evaporate this, by means of a water-bath, to the proper consistence.

EXTRACTUM CANNABIS PURIFICATUM.

Purified Extract of Hemp.

Take of Extract of Hemp two troyounces ;

Alcohol a sufficient quantity.

Rub the Extract with two fluidounces of Alcohol until they are thoroughly mixed ; and, having added twelve fluidounces of Alcohol, allow the mixture to macerate for twenty-four hours. Then filter the tincture through paper, passing sufficient Alcohol, through the filter, to exhaust the dregs completely. Lastly, by means of a water-bath, at a temperature not exceeding 160°, evaporate to dryness.

EXTRACTUM CINCHONÆ.*Extract of Cinchona.*

Extractum Cinchonæ Flavæ, *Pharm.*, 1850.

Take of Yellow Cinchona, in fine powder, twelve troyounces ;

Alcohol four pints ;

Water a sufficient quantity.

Introduce the powder, previously mixed with three fluidounces of Alcohol, into a conical glass percolator, and gradually pour upon it the remainder of the Alcohol. When the liquid ceases to pass, pour upon the residue sufficient Water to keep its surface covered, until four pints of tincture

have passed. Set this aside, and continue the percolation until six pints of infusion are obtained. Distil off the alcohol from the tincture, and evaporate the infusion until the liquids respectively are brought to the consistence of thin honey; then mix them, and evaporate to the proper consistence.

EXTRACTUM COLCHICI ACETICUM.

Acetic Extract of Colchicum.

Take of Colchicum Root, in moderately fine powder, twelve troyounces;
Acetic Acid four fluidounces;
Water a sufficient quantity.

To the Acetic Acid add a pint of Water, and mix the resulting liquid with the Colchicum Root. Transfer the mixture to a conical glass percolator, and pour Water gradually upon it until the liquid passes with little or no taste. Lastly, evaporate the liquid, in a porcelain vessel, to the proper consistence.

EXTRACTUM COLOCYNTHIDIS ALCOHOLICUM.

Alcoholic Extract of Colocynth.

Take of Colocynth forty-eight troyounces;
Diluted Alcohol a sufficient quantity.
Dry the Colocynth, and, having removed the

seeds and reduced it to coarse powder by grinding or bruising, macerate it in eight pints of Diluted Alcohol for four days, with occasional stirring; then express strongly, and strain through flannel. Pack the residue, previously broken up with the hands, firmly in a cylindrical percolator, cover it with the strainer, and pour Diluted Alcohol upon it, until the tincture and expressed liquid, taken together, measure sixteen pints. Mix the tincture with the expressed liquid, and, having recovered from the mixture ten pints of alcohol by distillation, evaporate the residue to dryness by means of a water-bath. Lastly, reduce the dry mass to powder, and keep it in a well-stopped bottle.

The Extract obtained by this process weighs about seven troyounces.

EXTRACTUM COLOCYNTHIDIS COMPOSITUM.

Compound Extract of Colocynth.

Take of Alcoholic Extract of Colocynth, in fine powder, three troyounces and a half;
Socotrine Aloes, in fine powder, twelve troyounces;
Resin of Scammony, in fine powder, three troyounces;

Cardamom, in fine powder, a troyounce;
Soap, in fine powder, three troyounces.

Mix the powders thoroughly, and keep the mixture in a well-stopped bottle.

EXTRACTUM CONII.

Extract of Hemlock.

Take of Hemlock, fresh, twelve troyounces.

Bruise the Hemlock in a stone mortar, sprinkling on it a little water, and express the juice; then, having heated this to the boiling point, filter it, and evaporate to the proper consistence, either in a vacuum with the aid of heat, or in shallow vessels, at the ordinary temperature, by means of a current of air, directed over the surface of the liquid.

EXTRACTUM CONII ALCOHOLICUM.

Alcoholic Extract of Hemlock.

Take of Hemlock, recently dried and in fine powder, twelve troyounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Introduce the powder, previously mixed with one-third of the Alcohol, into a conical percolator, and pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the

powder, pour Diluted Alcohol upon it until a pint of tincture has been obtained. Set this aside in a warm place, and allow it to evaporate spontaneously until reduced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, or until the powder is exhausted; then evaporate this liquid, by means of a water-bath, at a temperature not exceeding 160° , to the consistence of syrup. To this add the three fluidounces of tincture first obtained, and continue the evaporation, at a temperature not exceeding 120° , until the whole is reduced to the proper consistence.

EXTRACTUM DIGITALIS ALCOHOLICUM.

Alcoholic Extract of Digitalis.

Take of Digitalis, recently dried and in fine powder, twelve troyounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Introduce the powder, previously mixed with one-third of the Alcohol, into a percolator, and pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the powder, pour Diluted Alcohol upon it until a pint of tincture has been obtained. Set this aside in a warm place,

and allow it to evaporate spontaneously until reduced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, or until the powder is exhausted; then evaporate this liquid, by means of a water-bath, at a temperature not exceeding 160°, to the consistence of syrup. To this add the three fluidounces of tincture first obtained, and continue the evaporation, at a temperature not exceeding 120°, until the whole is reduced to the proper consistence.

EXTRACTUM DULCAMARÆ.

Extract of Bittersweet.

Take of Bittersweet, in moderately fine powder,
twelve troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the Bittersweet with four fluidounces of Diluted Alcohol, pack it in a conical percolator, and pour Diluted Alcohol gradually upon it until the tincture passes but slightly impregnated with the properties of the Bittersweet. Distil off the alcohol from the tincture until reduced to one-half; then strain, and, by means of a water-bath, evaporate to the proper consistence.

EXTRACTUM GENTIANÆ.

Extract of Gentian.

Take of Gentian, in moderately coarse powder,
twelve troyounces ;

Water a sufficient quantity.

Moisten the Gentian with four fluidounces of Water, pack it in a conical percolator, and gradually pour Water upon it until the infusion passes but slightly impregnated with the properties of the Gentian. Boil the liquid to three-fourths of its bulk ; then strain, and, by means of a water-bath, evaporate to the proper consistence.

EXTRACTUM HÆMATOXYLI.

Extract of Logwood.

Take of Logwood, rasped, twelve troyounces ;

Water eight pints.

Boil down to four pints, and strain the decoction while hot ; then evaporate to dryness.

EXTRACTUM HELLEBORI ALCOHOLICUM.

Alcoholic Extract of Black Hellebore.

Extractum Hellebori, *Pharm.*, 1850.

Take of Black Hellebore, recently dried and in fine powder, twelve troyounces ;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Introduce the powder, previously mixed with one-third of the Alcohol, into a conical percolator, and pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the powder, pour on Diluted Alcohol until a pint of tincture has been obtained. Set this aside in a warm place, and allow it to evaporate spontaneously until reduced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, or until the powder is exhausted; then evaporate, by means of a water-bath, at a temperature not exceeding 160°, to the consistence of syrup. To this add the three fluidounces of tincture first obtained, and continue the evaporation, at a temperature not exceeding 120°, until the whole is reduced to the proper consistence.

EXTRACTUM HYOSCYAMI.

Extract of Henbane.

Take of Henbane Leaf, fresh, twelve troy-ounces.

Bruise the Leaf in a stone mortar, sprinkling on it a little water, and express the juice; then, having

heated this to the boiling point, strain, and evaporate to the proper consistence.

EXTRACTUM HYOSCYAMI ALCOHOLICUM.

Alcoholic Extract of Henbane.

Take of Henbane Leaf, recently dried and in moderately fine powder, twenty-four troyounces ;

Alcohol four pints ;

Water two pints ;

Diluted Alcohol a sufficient quantity.

Mix the Alcohol and Water, and moisten the powder with a pint of the mixture ; then pack it firmly in a conical percolator, and gradually pour upon it the remainder of the mixture. Continue the percolation with Diluted Alcohol until the tincture measures six pints. Lastly, evaporate this, by means of a water-bath, to the proper consistence.

EXTRACTUM IGNATIÆ ALCOHOLICUM.

Alcoholic Extract of Ignatia.

Take of Ignatia, in fine powder, twelve troyounces ;

Alcohol a sufficient quantity.

Mix the Ignatia with four fluidounces of Alcohol, and allow the mixture to stand for an hour.

Then introduce it into a cylindrical percolator, press it firmly, and gradually pour Alcohol upon it until three pints of tincture have slowly passed. Distil off the alcohol, by means of a water-bath, until the tincture is reduced to half a pint, and evaporate this to the proper consistence.

EXTRACTUM JALAPÆ.

Extract of Jalap.

Take of Jalap, in moderately fine powder, twelve troyounces ;

Alcohol four pints ;

Water a sufficient quantity.

Introduce the powder, previously mixed with three fluidounces of Alcohol, into a conical percolator, and gradually pour upon it the remainder of the Alcohol. When the liquid ceases to pass, pour upon the residue sufficient Water to keep its surface covered, until four pints of tincture have passed. Set this aside, and continue the percolation until six pints of infusion have been obtained. Distil off the alcohol from the tincture, and evaporate the infusion until the liquids respectively have been brought to the consistence of thin honey ; then mix them, and evaporate to the proper consistence.

EXTRACTUM JUGLANDIS.

Extract of Butternut.

Take of Butternut, in moderately coarse powder,
twelve troyounces ;

Water a sufficient quantity.

Moisten the Butternut with four fluidounces of Water, pack it in a conical percolator, and gradually pour Water upon it until the infusion passes but slightly impregnated with the properties of the Butternut. Boil the liquid to three-fourths of its bulk ; then strain, and, by means of a water-bath, evaporate to the proper consistence.

EXTRACTUM KRAMERLÆ.*Extract of Rhatany.*

Take of Rhatany, in moderately fine powder,
twelve troyounces ;

Water a sufficient quantity.

Moisten the powder with four fluidounces of Water, pack it in a conical percolator, and gradually pour Water upon it until the infusion passes but slightly impregnated with the astringent property of the Rhatany. Heat the liquid to the boiling point, strain, and, by means of a water-bath, at a temperature not exceeding 160°, evaporate to the proper consistence.

EXTRACTUM NUCIS VOMICÆ ALCOHOLICUM.

*Alcoholic Extract of Nux Vomica.*Extractum Nucis Vomicæ, *Pharm.*, 1850.

Take of Nux Vomica, in fine powder, twelve
troyounces;

Alcohol a sufficient quantity.

Mix the Nux Vomica with four fluidounces of Alcohol, and allow the mixture to stand for an hour. Then introduce it into a cylindrical percolator, and gradually pour Alcohol upon it until the tincture passes without bitterness. Distil off the alcohol, by means of a water-bath, until the tincture is reduced to half a pint, and evaporate this to the proper consistence.

EXTRACTUM OPII.

Extract of Opium.

Take of Opium twelve troyounces;

Water five pints.

Cut the Opium into small pieces, macerate it for twenty-four hours in a pint of the Water, and reduce it to a soft mass by trituration. Express the liquid, and treat the residue with each of the four remaining pints of Water successively in the same manner. Having mixed the liquids, filter

the mixture, and evaporate, by means of a water-bath, to the proper consistence.

EXTRACTUM PODOPHYLLI.

Extract of May-apple.

Take of May-apple, in moderately fine powder,
twelve troyounces ;

Alcohol four pints ;

Water a sufficient quantity.

Introduce the powder, previously mixed with three fluidounces of Alcohol, into a conical percolator, and pour upon it the remainder of the Alcohol. When the tincture ceases to pass, pour gradually upon the powder sufficient Water to keep its surface covered, until four pints of tincture have passed. Set this aside, and continue the percolation until six pints of infusion have been obtained. Distil off the alcohol from the tincture, and evaporate the infusion, until the liquids respectively have been brought to the consistence of thin honey ; then mix them, and evaporate to the proper consistence.

EXTRACTUM QUASSIÆ.

Extract of Quassia.

Take of Quassia, in moderately fine powder,
twelve troyounces;

Water a sufficient quantity.

Moisten the Quassia with four fluidounces of Water, pack it in a conical percolator, and gradually pour Water upon it until the infusion passes but slightly impregnated with the properties of the Quassia. Boil down the liquid to three-fourths of its bulk; then strain, and, by means of a water-bath, evaporate to the proper consistence.

EXTRACTUM RHEI ALCOHOLICUM.

Alcoholic Extract of Rhubarb.

Extractum Rhei, *Pharm.*, 1850.

Take of Rhubarb, in moderately fine powder,
twelve troyounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Moisten the powder with four fluidounces of the Alcohol, pack it in a conical percolator, and gradually pour upon it, first the remainder of the Alcohol, and afterwards Diluted Alcohol, until twelve fluidounces of tincture have been obtained. Set this aside in a warm place, and allow it to

evaporate spontaneously until reduced to six fluid-ounces. Continue the percolation with Diluted Alcohol until the tincture passes nearly tasteless. Evaporate this in a porcelain vessel, by means of a water-bath, at a temperature not exceeding 160°, to the consistence of syrup. With this mix the tincture first obtained, and continue the evaporation until the mixture is reduced to the proper consistence.

EXTRACTUM SENEGÆ ALCOHOLICUM.

Alcoholic Extract of Seneka.

Take of Seneka, in moderately fine powder,
twelve troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with four fluidounces of Diluted Alcohol, pack it in a conical percolator, and gradually pour upon it Diluted Alcohol until three pints of tincture have passed. Evaporate this, by means of a water-bath, to the proper consistence.

EXTRACTUM STRAMONII.

Extract of Stramonium.

Extractum Stramonii Foliorum, *Pharm.*, 1850.

Take of Stramonium Leaf twelve troyounces.

Bruise it in a stone mortar, sprinkling on it a

little water, and express the juice; then, having heated this to the boiling point, strain, and evaporate, at a temperature not exceeding 160° , to the proper consistence.

EXTRACTUM STRAMONII ALCOHOLICUM.

Alcoholic Extract of Stramonium.

Take of Stramonium Leaf, recently dried and in fine powder, twelve troyounces;
Alcohol a pint;
Diluted Alcohol a sufficient quantity.

Introduce the powder, previously mixed with one-third of the Alcohol, into a conical percolator, and gradually pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the powder, pour on Diluted Alcohol until a pint of tincture has been obtained. Set this aside in a warm place, and allow it to evaporate spontaneously until reduced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, or until the powder is exhausted; then evaporate, by means of a water-bath, at a temperature not exceeding 160° , to the consistence of syrup. With this mix the three fluidounces of tincture first obtained, and continue the evaporation, at a tem-

perature not exceeding 120°, until the mixture is reduced to the proper consistence.

EXTRACTUM TARAXACI.

Extract of Dandelion.

Take of Dandelion, gathered in September, sixty troyounces.

Slice the Dandelion, and bruise it in a stone mortar, sprinkling on it a little water, until reduced to a pulp. Then express and strain the juice, and evaporate it in a vacuum, or in a shallow dish over a water-bath, to the proper consistence.

EXTRACTUM VALERIANÆ ALCOHOLICUM.

Alcoholic Extract of Valerian.

Take of Valerian, in fine powder, twelve troyounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Moisten the powder with four fluidounces of Alcohol, pack it in a percolator, and gradually pour upon it the remainder of the Alcohol. When the liquid has all been absorbed by the powder, pour on Diluted Alcohol until a pint of tincture has been obtained. Set this aside in a warm place, and allow it to evaporate spontaneously until re-

duced to three fluidounces. Continue the percolation with Diluted Alcohol until two pints more of tincture have passed, and evaporate this, by means of a water-bath, to the consistence of syrup. Lastly, mix the two liquids, and continue the evaporation, at a temperature not exceeding 120° , until the mixture is reduced to the proper consistence.

EXTRACTA FLUIDA.

EXTRACTUM BUCHU FLUIDUM.

Fluid Extract of Buchu.

Take of Buchu, in moderately fine powder,
sixteen troyounces ;

Alcohol a sufficient quantity.

Moisten the Buchu with six fluidounces of Alcohol, introduce it into a cylindrical percolator, press it firmly, and gradually pour Alcohol upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150° , to four fluidounces, and mix it with the reserved tincture. Allow the mixture to stand for twenty-four hours, and filter through paper.

EXTRACTUM CIMICIFUGÆ FLUIDUM.

Fluid Extract of Cimicifuga.

Take of Cimicifuga, in fine powder, sixteen troy-ounces ;

Stronger Alcohol a pint and a half ;

Diluted Alcohol a sufficient quantity.

Moisten the Cimicifuga with four fluidounces of the Stronger Alcohol, introduce it into a conical percolator, pour upon it the remainder of the Stronger Alcohol, and, when the whole of this has entered the powder, gradually add Diluted Alcohol until a pint and a half of tincture have passed. Set this aside, in a shallow vessel, in a warm place, until reduced by spontaneous evaporation to twelve fluidounces. Continue the percolation with Diluted Alcohol, until two pints more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150° , to four fluidounces ; then add the tincture first obtained very gradually so as to avoid precipitation, allow the mixture to stand for twenty-four hours, and filter through paper.

EXTRACTUM CINCHONÆ FLUIDUM.

Fluid Extract of Cinchona.

Take of Yellow Cinchona, in moderately fine powder, sixteen troyounces ;

Sugar, in coarse powder, twenty troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Cinchona with ten fluidounces of Diluted Alcohol, allow it to stand for half an hour, pack it firmly in a cylindrical percolator, and gradually pour upon it Diluted Alcohol until four pints of tincture have been obtained. Evaporate this, by means of a water-bath, to two pints ; then add the Sugar, evaporate again to two pints, and strain the liquid while hot.

EXTRACTUM COLCHICI RADICIS FLUIDUM.

Fluid Extract of Colchicum Root.

Take of Colchicum Root, in fine powder, sixteen troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Mix two measures of Alcohol with one of Water, moisten the Colchicum Root with six fluidounces of the mixture, press it moderately in a conical percolator, and gradually pour the mixture upon it

until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints more of tincture have been obtained. Evaporate this to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM COLCHICI SEMINIS FLUIDUM.

Fluid Extract of Colchicum Seed.

Take of Colchicum Seed, in moderately fine powder, sixteen troyounces;

Alcohol,

Water, each, a sufficient quantity.

Mix two measures of Alcohol with one of Water, moisten the Colchicum Seed with six fluidounces of the mixture, press it firmly in a conical percolator, and pour the mixture upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints more of tincture have been obtained. Evaporate this to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM CONII FLUIDUM.

Fluid Extract of Hemlock.

Take of Hemlock, recently dried and in fine powder, sixteen troyounces;

Acetic Acid half a fluidounce ;

Diluted Alcohol a sufficient quantity.

Mix the Acid with three pints of Diluted Alcohol, moisten the powder with half a pint of the mixture, pack it in a conical glass percolator, and gradually pour the mixture upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation, first with the remainder of the mixture, and afterwards with Diluted Alcohol, until three pints more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150°, to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM DULCAMARÆ FLUIDUM.

Fluid Extract of Bittersweet.

Take of Bittersweet, in moderately fine powder,
sixteen troyounces ;

Sugar, in coarse powder, ten troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Bittersweet with half a pint of Diluted Alcohol, pack it in a conical percolator, and pour upon it Diluted Alcohol until three pints of tincture have passed. Evaporate this, by means

of a water-bath, to a pint, add the Sugar, evaporate again to a pint, and strain the liquid while hot.

EXTRACTUM ERGOTÆ FLUIDUM.

Fluid Extract of Ergot.

Take of Ergot, in fine powder, sixteen troy-ounces;

Acetic Acid half a fluidounce;

Diluted Alcohol a sufficient quantity.

Mix the Acid with three pints of Diluted Alcohol, and, having moistened the Ergot with four fluidounces of the mixture, introduce it into a conical glass percolator, pressing moderately, and gradually pour the mixture upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation, first with the remainder of the mixture, and afterwards with Diluted Alcohol, until three pints more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150°, to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM GENTIANÆ FLUIDUM.

Fluid Extract of Gentian.

Take of Gentian, in moderately fine powder,
sixteen troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Gentian with six fluidounces of Diluted Alcohol, introduce it into a conical percolator, pressing moderately, and pour upon it Diluted Alcohol until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints more of tincture have been obtained. Evaporate this, by means of a water-bath, to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM HYOSCYAMI FLUIDUM.

Fluid Extract of Henbane.

Take of Henbane Leaf, in fine powder, sixteen
troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Mix two measures of Alcohol with one of Water, moisten the powder with six fluidounces of the mixture, pack it firmly in a conical percolator, and gradually pour the mixture upon it until twelve fluidounces of tincture have passed. Set this

aside, and continue the percolation with the same mixture until two pints and a half more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150°, to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM IPECACUANHÆ FLUIDUM.

Fluid Extract of Ipecacuanha.

Take of Ipecacuanha, in fine powder, sixteen
troyounces;
Acetic Acid a fluidounce;
Alcohol,
Water, each, a sufficient quantity.

Moisten the Ipecacuanha with six fluidounces of Alcohol, introduce it into a conical percolator, press it firmly, and pour Alcohol upon it until three pints of tincture have slowly passed, or until the Ipecacuanha is exhausted. Distil off the alcohol from the tincture, by means of a water-bath, until a syrupy liquid is left. Mix this with the Acetic Acid and ten fluidounces of Water, boil the mixture gently until it is reduced to half a pint, and the resinous matter has separated. Filter the liquid when cold, and add sufficient Water, through the

filter, to make the filtered liquid measure half a pint. Lastly, mix this with half a pint of Alcohol.

EXTRACTUM LUPULINÆ FLUIDUM.

Fluid Extract of Lupulin.

Take of Lupulin sixteen troyounces ;

Stronger Alcohol a sufficient quantity.

Introduce the Lupulin into a percolator, press it firmly, and, having covered it with a piece of muslin, pour upon it Stronger Alcohol very gradually until twelve fluidounces of tincture have passed. Set this aside in a close vessel, and continue the percolation until twenty fluidounces more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150°, to four fluidounces, and mix it with the reserved tincture.

EXTRACTUM PRUNI VIRGINIANÆ FLUIDUM.

Fluid Extract of Wild-cherry Bark.

Take of Wild-cherry Bark, in fine powder,
sixteen troyounces ;

Sweet Almond two troyounces ;

Sugar, in coarse powder, twenty-four
troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Introduce the Bark, previously mixed with four fluidounces of Alcohol, into a cylindrical percolator, press it firmly, and gradually pour Alcohol upon it until three pints of tincture have slowly passed. From this distil off two pints and a half of alcohol, and, having mixed the residue with a pint of Water, evaporate, by means of a water-bath, to half a pint.

Beat the Almond into a paste, and rub this with successive portions of Water until, after straining through a coarse sieve or cloth, nearly all the substance of the Almond has been converted into an emulsion, and twelve fluidounces of liquid have been obtained. Mix this with the liquid first obtained, in a suitable bottle, and, having closely stopped it, agitate occasionally during twenty-four hours. Then express quickly and strongly through a cloth; and, if the expressed liquid measure less than eighteen fluidounces, add Water to the residue, and again express until that quantity is obtained. Filter the expressed liquid through cotton flannel, in a covered funnel, into a bottle containing the Sugar. Shake the bottle occasionally during the process until the Sugar is dissolved, and continue

the filtration until the syrupy liquid measures two pints. Lastly, mix the whole thoroughly together.

EXTRACTUM RHEI FLUIDUM.

Fluid Extract of Rhubarb.

Take of Rhubarb, in moderately fine powder,
sixteen troyounces;

Sugar, in coarse powder, eight troy-
ounces;

Alcohol a pint;

Diluted Alcohol a sufficient quantity.

Moisten the Rhubarb with four fluidounces of the Alcohol, introduce it into a conical percolator, press it gently, and pour upon it the remainder of the Alcohol. When the liquid has disappeared from the surface, gradually pour on Diluted Alcohol until a pint of tincture has passed. Set this aside in a warm place until reduced by spontaneous evaporation to six fluidounces, and continue the percolation until two pints more of tincture have been obtained. Evaporate this by a gentle heat to six fluidounces; then add the Sugar, and, when this is dissolved, the reserved tincture, and continue the heat until the whole is reduced to the measure of a pint.

EXTRACTUM SARSAPARILLÆ FLUIDUM.

Fluid Extract of Sarsaparilla.

Take of Sarsaparilla, in moderately fine powder,
sixteen troyounces ;
Sugar, in coarse powder, ten troyounces ;
Diluted Alcohol a sufficient quantity.

Moisten the Sarsaparilla with half a pint of Diluted Alcohol, pack it firmly in a cylindrical percolator, and gradually pour upon it Diluted Alcohol until four pints of tincture have been obtained. Evaporate this, by means of a water-bath, to a pint; then add the Sugar, and continue the evaporation until the liquid is reduced to the measure of a pint, and strain while hot.

EXTRACTUM SARSAPARILLÆ FLUIDUM COMPOSITUM.

Compound Fluid Extract of Sarsaparilla.

Extractum Sarsaparillæ Fluidum, *Pharm.*, 1850.

Take of Sarsaparilla, in moderately fine powder,
sixteen troyounces ;
Liquorice Root, in moderately fine powder,
Bark of Sassafras Root, in moderately fine powder, each, two troyounces ;
Mezereon, in moderately fine powder,
three hundred and sixty grains ;

Sugar twelve troyounces ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with ten fluidounces of Diluted Alcohol, pack it firmly in a cylindrical percolator, and gradually pour upon it Diluted Alcohol until four pints of tincture have been obtained. Evaporate this, by means of a water-bath, to twelve fluidounces ; then add the Sugar, and continue the evaporation until the liquid is reduced to the measure of eighteen fluidounces, and strain while hot.

EXTRACTUM SENNÆ FLUIDUM.

Fluid Extract of Senna.

Take of Senna, in moderately fine powder,
sixteen troyounces ;

Sugar, in coarse powder, eight troy-
ounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Senna with six fluidounces of Diluted Alcohol, introduce it into a conical percolator, press it firmly, and gradually pour upon it Diluted Alcohol until a pint of tincture has passed. Set this aside in a warm place until reduced by spontaneous evaporation to half a pint. Continue the percolation, until two pints more of tincture

have been obtained. To this add the Sugar, and, having evaporated it, by means of a water-bath, to half a pint, mix it with the reserved tincture, and strain.

EXTRACTUM SERPENTARIÆ FLUIDUM.

Fluid Extract of Serpentaria.

Take of Serpentaria, in moderately fine powder,
sixteen troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the Serpentaria with five fluidounces of Diluted Alcohol, introduce it into a conical percolator, press it firmly, and gradually pour upon it Diluted Alcohol until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints and a half more of tincture have been obtained. Evaporate this at a temperature not exceeding 150° until it is reduced to four fluidounces, mix it with the reserved tincture, and filter through paper.

EXTRACTUM SPIGELIÆ ET SENNÆ FLUIDUM.

Fluid Extract of Spigelia and Senna.

Take of Fluid Extract of Spigelia ten fluid-
ounces;

Fluid Extract of Senna six fluidounces;
Carbonate of Potassa half a troyounce;
Oil of Anise,
Oil of Caraway, each, twenty minims.

Mix the Fluid Extracts, and dissolve in the mixture the Carbonate of Potassa and the Oils, previously rubbed together.

EXTRACTUM SPIGELLÆ FLUIDUM.

Fluid Extract of Spigelia.

Take of Spigelia, in fine powder, sixteen troy-ounces;

Sugar, in coarse powder, eight troy-ounces;

Diluted Alcohol a sufficient quantity.

Moisten the Spigelia with six fluidounces of Diluted Alcohol, introduce it into a conical percolator, press it firmly, and gradually pour upon it Diluted Alcohol until a pint of tincture has passed. Set this aside in a warm place until it is reduced by spontaneous evaporation to half a pint. Continue the percolation until two pints more of tincture have been obtained. To this add the Sugar, and, having evaporated $\frac{1}{4}$ it, by means of a water-bath, to half a pint, mix it with the reserved tincture, and strain.

EXTRACTUM TARAXACI FLUIDUM.

Fluid Extract of Dandelion.

Take of Dandelion, in moderately fine powder,
sixteen troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Dandelion with four fluidounces of Diluted Alcohol, introduce it into a conical percolator, press it firmly, and gradually pour upon it Diluted Alcohol until half a pint of tincture has passed. Set this aside, and continue the percolation until two pints and a half more of tincture have been obtained. Evaporate this at a temperature not exceeding 120° until it is reduced to half a pint, mix it with the reserved tincture, and filter through paper.

EXTRACTUM UVÆ URSI FLUIDUM.

Fluid Extract of Uva Ursi.

Take of Uva Ursi, in moderately fine powder,
sixteen troyounces ;

Sugar, in coarse powder, eight troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the Uva Ursi with six fluidounces of Diluted Alcohol, introduce it into a conical glass percolator, press it firmly, and gradually pour upon

it Diluted Alcohol until half a pint of tincture has passed. Set this aside, and continue the percolation until two pints and a half more of tincture have been obtained. Evaporate this, by means of a water-bath, to four fluidounces, and, having dissolved the Sugar in it while hot, mix it with the reserved tincture, and strain. Lastly, evaporate the whole by a gentle heat until it is reduced to a pint.

EXTRACTUM VALERIANÆ FLUIDUM.

Fluid Extract of Valerian.

Take of Valerian, in fine powder, sixteen troy-ounces;

Alcohol a sufficient quantity.

Moisten the Valerian with six fluidounces of Alcohol, introduce it into a conical percolator, press it firmly, and gradually pour Alcohol upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until two pints more of tincture have been obtained. Evaporate this to four fluidounces at a temperature not exceeding 120°, mix it with the reserved tincture, and filter through paper.

EXTRACTUM VERATRI VIRIDIS FLUIDUM.

Fluid Extract of American Hellebore.

Take of American Hellebore, in fine powder,
sixteen troyounces ;

Alcohol a sufficient quantity.

Moisten the Hellebore with six fluidounces of Alcohol, introduce it into a cylindrical percolator, press it firmly, and gradually pour Alcohol upon it until half a pint of tincture has passed. Set this aside, and continue the percolation until two pints and a half more of tincture have been obtained. Evaporate this, by means of a water-bath, at a temperature not exceeding 150°, to half a pint, mix it with the reserved tincture, and filter through paper.

EXTRACTUM ZINGIBERIS FLUIDUM.

Fluid Extract of Ginger.

Take of Ginger, in fine powder, sixteen troy-ounces ;

Alcohol a sufficient quantity.

Moisten the Ginger with four fluidounces of Alcohol, introduce it into a cylindrical percolator, press it firmly, and gradually pour Alcohol upon it until twelve fluidounces of tincture have passed. Set this aside, and continue the percolation until twenty

fluidounces more of tincture have been obtained. Evaporate this to four fluidounces, mix it with the reserved tincture, and filter through paper.

F E R R U M.

FERRI CHLORIDUM.

Chloride of Iron.

Take of Iron, in the form of wire and cut in pieces, two troyounces;
Muriatic Acid twelve troyounces;
Nitric Acid a troyounce, or a sufficient quantity.

To eight troyounces of the Muriatic Acid, introduced into a two-pint flask, add the Iron, and apply a gentle heat until the Acid is saturated and effervescence has ceased. Filter the solution, add to it the remainder of the Muriatic Acid, heat the mixture nearly to the boiling point in a four-pint porcelain capsule, and add Nitric Acid in successive portions until red fumes are no longer evolved, and a drop of the liquid ceases to yield a blue precipitate with ferridcyanide of potassium. Transfer the liquid to a smaller capsule, evaporate it by a gentle heat, on a sand-bath, until reduced

to eight troyounces and three hundred and sixty grains, and set it aside, covered with glass, for several days, in order that it may form a solid, crystalline mass. Lastly, break this into pieces, and keep the fragments in a well-stopped bottle protected from the light.

In orange-yellow, crystalline pieces, very deliquescent, and wholly soluble in water, alcohol, and ether. Its solution in water affords with ammonia a brown precipitate of hydrated sesquioxide of iron, and does not yield a blue one with ferridecyanide of potassium (red prussiate of potassa).

FERRI CITRAS.

Citrate of Iron.

Take of Solution of Citrate of Iron a convenient quantity.

Evaporate it to the consistence of syrup, and spread it on plates of glass, so that, on drying, the salt may be obtained in scales.

FERRI ET AMMONIÆ CITRAS.

Citrate of Iron and Ammonia.

Take of Solution of Citrate of Iron a pint;

Water of Ammonia six fluidounces.

Mix the Solution of Citrate of Iron with the Water of Ammonia, evaporate the mixture at a temperature not exceeding 150° to the consistence

of syrup, and spread it on plates of glass, so that, on drying, the salt may be obtained in scales.

In garnet-red translucent scales, of a slightly ferruginous taste, and readily and wholly soluble in water. The solution causes no change in the colour of litmus or turmeric, and does not yield a precipitate with ferrocyanide of potassium. Solution of potassa produces with it a precipitate of sesquioxide of iron, with the evolution of ammonia.

FERRI ET AMMONIÆ SULPHAS.

Sulphate of Iron and Ammonia.

Ammonio-ferric Alum.

Take of Solution of Tersulphate of Iron two pints;

Sulphate of Ammonia four troyounces and a half.

Heat the Solution of Tersulphate of Iron to the boiling point, add the Sulphate of Ammonia, stirring until it is dissolved, and set the liquid aside to crystallize. Wash the crystals quickly with very cold water, wrap them in bibulous paper, and dry them in the open air.

In octohedral crystals, of a pale-violet colour, soluble in one and a half parts of water at 60°, and in less than their weight of boiling water. Potassa produces with the solution a reddish-brown precipitate. When rubbed with potassa and moistened, the salt emits the odour of ammonia.

FERRI ET AMMONIÆ TARTRAS.

Tartrate of Iron and Ammonia.

Take of Tartaric Acid twelve troyounces;
Solution of Tersulphate of Iron two
pints and a half;
Carbonate of Ammonia,
Distilled Water, each, a sufficient quantity.

Dissolve six troyounces of the Tartaric Acid in two pints of Distilled Water, and saturate it carefully by means of Carbonate of Ammonia; then add the remainder of the Acid, dissolved in half a pint of Distilled Water, and mix the solutions. With the Solution of Tersulphate of Iron, prepare the Hydrated Oxide of Iron according to the formula for that substance, and add it gradually to the solution of bitartrate of ammonia, kept at the temperature of 150° , until it is no longer dissolved. Then filter the solution, and evaporate to the consistence of syrup. Lastly, spread it on plates of glass, so that, on drying, the salt may be obtained in scales.

In transparent, garnet-red scales, which have a saccharine taste. When reduced to powder it assumes a rust-brown colour. It is slowly soluble in rather more than its weight of water, but insoluble in alcohol and ether. It is neutral to test paper, and is not precipitated by solutions of the fixed alkalies, nor rendered blue by ferro-

cyanide of potassium. When incinerated it yields twenty-nine per cent. of sesquioxide of iron.

FERRI ET POTASSÆ TARTRAS.

Tartrate of Iron and Potassa.

Take of Solution of Tersulphate of Iron a pint;
Bitartrate of Potassa seven troyounces;
Distilled Water four pints.

With the Solution of Tersulphate of Iron, prepare the Hydrated Oxide of Iron according to the formula for that substance. Mix the Bitartrate of Potassa with the Distilled Water, heat the mixture to 140° , and, keeping it at that temperature, gradually add the Hydrated Oxide, frequently stirring, until it ceases to be dissolved. Then filter the solution, evaporate it by means of a water-bath to the consistence of syrup, and spread it upon plates of glass or porcelain, so that, on drying, the salt may be obtained in scales.

In transparent scales, of a dark ruby-red colour, and wholly soluble in water. The solution does not change the colour of litmus, and, at common temperatures, does not yield a precipitate with potassa, soda, or ammonia. Ferrocyanide of potassium does not render it blue, unless an acid be added.

FERRI ET QUININÆ CITRAS.

Citrate of Iron and Quinia.

Take of Solution of Citrate of Iron ten fluid-
ounces ;
Sulphate of Quinia a troyounce ;
Diluted Sulphuric Acid,
Water of Ammonia,
Distilled Water, each, a sufficient quantity.

Triturate the Sulphate of Quinia with six fluid-ounces of Distilled Water, and, having added sufficient Diluted Sulphuric Acid to dissolve it, cautiously pour into the solution Water of Ammonia, with constant stirring, until in slight excess. Wash the precipitated quinia on a filter, and, having added it to the Solution of Citrate of Iron, maintained at the temperature of 120° by means of a water-bath, stir constantly until it is dissolved. Lastly, evaporate the solution to the consistence of syrup, and spread it on plates of glass, so that, on drying, the salt may be obtained in scales.

In thin transparent scales, varying in colour from reddish-brown to yellowish-brown with a tint of green, according to the thickness of the scales. Its taste is ferruginous and moderately bitter. It is slowly soluble in cold water, more readily so in hot water, but insoluble in ether and officinal alcohol. Ammonia, added to the aqueous solution, deepens its colour to reddish-brown, and causes a

whitish, curdy precipitate of quinia; but no sesquioxide of iron is thrown down.

FERRI FERROCYANIDUM.

Ferrocyanide of Iron.

Ferri Ferrocyanuretum, *Pharm.*, 1850.

Pure Prussian Blue.

Take of Ferrocyanide of Potassium nine troy-ounces;

Solution of Tersulphate of Iron a pint;

Water three pints.

Dissolve the Ferrocyanide of Potassium in two pints of the Water, and add the solution gradually to the Solution of Tersulphate of Iron, previously diluted with the remainder of the Water, stirring the mixture during the addition. Then filter the liquid, and wash the precipitate on the filter with boiling water until the washings pass nearly tasteless. Lastly, dry it, and rub it into powder.

A tasteless powder, insoluble in water and the dilute mineral acids, and having a rich, deep-blue colour. Dilute muriatic acid, after having been boiled on it, yields no precipitate on the addition of ammonia.

FERRI LACTAS.

Lactate of Iron.

Take of Lactic Acid a fluidounce;

Iron, in the form of filings, half a troy-ounce ;

Distilled Water a sufficient quantity.

Mix the Acid with a pint of Distilled Water in an iron vessel, add the Iron, and digest the mixture on a water-bath, supplying Distilled Water, from time to time, to preserve the measure. When the action has ceased, filter the solution, while hot, into a porcelain capsule, and set it aside to crystallize. At the end of forty-eight hours, decant the liquid, wash the crystals with a little alcohol, and dry them on bibulous paper.

By evaporating the mother-water in an iron vessel to one-half, filtering while hot, and setting the liquid aside, more crystals may be obtained.

In greenish-white crystalline crusts or grains, of a mild, sweetish, ferruginous taste, soluble in forty-eight parts of cold, and twelve of boiling water, but insoluble in alcohol. Exposed to heat it froths up, gives out thick, white, acid fumes, and becomes black; sesquioxide of iron being left. If it be boiled for fifteen minutes with nitric acid of the specific gravity 1.20, a white, granular deposit of mucic acid will occur on the cooling of the liquid.

FERRI OXIDUM HYDRATUM.

Hydrated Oxide of Iron.

Take of Solution of Tersulphate of Iron a pint;
Water of Ammonia,
Water, each, a sufficient quantity.

To the Solution of Tersulphate of Iron, previously mixed with three pints of Water, add Water of Ammonia, with constant stirring, until in slight excess. Then pour the whole on a wet muslin strainer, and wash the precipitate with water until the washings pass nearly tasteless. Lastly, mix the precipitate with sufficient Water to make the mixture measure a pint and a half, and transfer it to a wide-mouthed bottle, which must be well stopped.

When Hydrated Oxide of Iron is to be made in haste for use as an antidote, the washing may be performed more quickly, though less perfectly, by pressing the strainer forcibly with the hands until no more liquid passes, and then mixing the precipitate with sufficient Water to bring the mixture to the measure of a pint and a half.

Hydrated Oxide of Iron is wholly soluble in muriatic acid without effervescence. If dried at a heat not exceeding 180° ; it afterwards loses, on exposure to a red heat, eighteen per cent. of water.

FERRI PHOSPHAS.

Phosphate of Iron.

Take of Sulphate of Iron five troyounces ;
Phosphate of Soda six troyounces ;
Water eight pints.

Dissolve the salts separately, each in four pints of the Water; then mix the solutions, and set the mixture by that the precipitate may subside. Lastly, having poured off the supernatant liquid, wash the precipitate with hot water, and dry it with a gentle heat.

A bright slate-coloured powder, insoluble in water, but soluble in the mineral acids. It is dissolved by dilute muriatic acid, forming a solution which yields with ammonia a precipitate, insoluble in an excess of the alkali.

FERRI PYROPHOSPHAS.

Pyrophosphate of Iron.

Take of Phosphate of Soda seven troyounces
and a half;

Solution of Tersulphate of Iron seven
fluidounces, or a sufficient quantity;

Citric Acid two troyounces;

Water of Ammonia five fluidounces
and a half, or a sufficient quantity;

Water a sufficient quantity.

Heat the Phosphate of Soda, in a porcelain capsule, until it undergoes the watery fusion, and continue the heat until it becomes dry. Transfer the dry salt to a shallow iron capsule, and heat it to incipient redness, without fusion. Then dis-

solve it in three pints of Water, with the aid of heat, and, having filtered the solution and cooled it to the temperature of 50° , add Solution of Tersulphate of Iron until this ceases to produce a precipitate. Stir the mixture thoroughly, and pour it upon a muslin strainer, and, when the precipitate has drained, wash it with water until the washings pass nearly tasteless, and transfer it to a weighed porcelain capsule.

To the Citric Acid, contained in a suitable vessel, add Water of Ammonia until the Acid is saturated and dissolved. Then add the solution to the precipitate in the weighed capsule, stir them together, and evaporate until the liquid is reduced to sixteen troyounces. Spread this on plates of glass or porcelain, so that, on drying, the salt may be obtained in scales. Lastly, preserve it in a well-stopped bottle, protected from the light.

Pyrophosphate of Iron, thus prepared, is in apple-green scales, having an acidulous, slightly saline taste. It is wholly and freely soluble in water. Ferrocyanide of potassium, when added to the dilute solution, gives rise to a pale-blue colour, but produces no precipitate. This preparation contains forty-eight per cent. of anhydrous pyrophosphate of iron.

FERRI SUBCARBONAS.

*Subcarbonate of Iron.**Precipitated Carbonate of Iron.*

Take of Sulphate of Iron eight troyounces ;
Carbonate of Soda nine troyounces ;
Water eight pints.

Dissolve the salts separately, each in four pints of the Water ; then mix the solutions, and, having stirred the mixture, set it by that the precipitate may subside. Having poured off the supernatant liquid, wash the precipitate with water until the washings pass nearly tasteless, and dry it on bibulous paper without heat.

A reddish-brown powder, wholly dissolved by dilute muriatic acid with slight effervescence, forming a solution from which the sesquioxide of iron is completely precipitated by ammonia added in excess. The liquid which remains is not coloured by hydrosulphuric acid or ferrocyanide of potassium.

FERRI SULPHAS.

Sulphate of Iron.

Take of Iron, in the form of wire and cut in pieces, twelve troyounces ;
Sulphuric Acid eighteen troyounces ;
Water eight pints.

Mix the Sulphuric Acid and Water, and add

the Iron; then heat the mixture until effervescence ceases. Pour off the solution, and, having added thirty grains of Sulphuric Acid, filter through paper, allowing the lower end of the funnel to touch the bottom of the receiving vessel. Evaporate the filtered liquid in a matrass until sufficiently concentrated; then set it aside in a covered vessel to crystallize. Drain the crystals in a funnel, dry them on bibulous paper, and keep them in a well-stopped bottle.

In transparent, bluish-green crystals, which, on exposure to the air, effloresce and change their colour. It is wholly soluble in water; and, when iron is immersed in the solution, a film of copper is not deposited upon its surface.

FERRI SULPHAS EXSICCATA.

Dried Sulphate of Iron.

Take of Sulphate of Iron, in coarse powder,
twelve troyounces.

Expose it, in an unglazed earthen vessel, to a moderate heat, with occasional stirring, until it has effloresced; then increase the heat to 300° , and maintain it at about that temperature until the salt ceases to lose weight. Lastly, reduce the residue to fine powder, and keep it in a well-stopped bottle.

A grayish-white powder, soluble in water with the exception of a small residue, and corresponding, in chemical characters, with Sulphate of Iron.

FERRUM REDACTUM.

Reduced Iron.

Ferri Pulvis, *Pharm.*, 1850.

Take of Subcarbonate of Iron thirty troyounces.

Wash the Subcarbonate thoroughly with water until no traces of sulphate of soda are indicated by the appropriate tests, and calcine it in a shallow vessel until free from moisture. Then spread it upon a tray, made by bending an oblong piece of sheet-iron in the form of an incomplete cylinder, and introduce this into a wrought iron reduction-tube, of about four inches in diameter. Place the reduction-tube in a charcoal furnace; and, by means of a self-regulating generator of hydrogen, pass through it a stream of that gas, previously purified by bubbling successively through Solution of Subacetate of Lead, diluted with three times its volume of water, and through milk of lime, severally contained in four-pint bottles, about one-third filled. Connect with the further extremity of the reduction-tube, a lead tube bent so as to dip into water. Make all the junctions air-tight by appropriate lutes; and, when the hydrogen has passed

long enough to fill the whole of the apparatus to the exclusion of atmospheric air, light the fire, and bring that part of the reduction-tube, occupied by the Subcarbonate, to a dull-red heat, which must be kept up so long as the bubbles of hydrogen, breaking from the water covering the orifice of the lead tube, are accompanied by visible aqueous vapour. When the reduction is completed, remove the fire, and allow the whole to cool to the ordinary temperature, keeping up, during the refrigeration, a moderate current of hydrogen through the apparatus. Withdraw the product from the reduction-tube, and, should any portion of it be black instead of iron-gray, separate such portion for use in a subsequent operation. Lastly, having powdered the Reduced Iron, keep it in a well-stopped bottle.

When thirty troyounces of Subcarbonate of Iron are operated on, the process occupies from five to eight hours.

A tasteless powder, of an iron-gray colour. It is wholly dissolved by a mixture of one part of sulphuric acid and sixty of water, without yielding the odour of hydrosulphuric acid. A small portion of it, struck on an anvil with a smooth hammer, forms a scale having a brilliant metallic lustre.

HYDRARGYRUM.

HYDRARGYRI CHLORIDUM CORROSIVUM.

*Corrosive Chloride of Mercury.**Corrosive Sublimate.*

Take of Mercury twenty-four troyounces;
Sulphuric Acid thirty-six troyounces;
Chloride of Sodium eighteen troyounces.

Boil, by means of a sand-bath, the Mercury with the Sulphuric Acid until a dry white mass is left. Rub this, when cold, with the Chloride of Sodium in an earthenware mortar; then sublime with a gradually increasing heat.

In colourless crystals or crystalline masses, which are fusible by heat, sublime without residue, and are entirely soluble in water, alcohol, and ether. Lime-water occasions with its solution a reddish or yellow precipitate, and ammonia a white one.

HYDRARGYRI CHLORIDUM MITE.*Mild Chloride of Mercury.**Calomel.*

Take of Mercury forty-eight troyounces;
Sulphuric Acid thirty-six troyounces;
Chloride of Sodium eighteen troyounces;
Distilled Water a sufficient quantity.

Boil, by means of a sand-bath, twenty-four troyounces of the Mercury with the Sulphuric Acid

until a dry white mass is left. Rub this, when cold, with the remainder of the Mercury, in an earthenware mortar, until they are thoroughly mixed. Then add the Chloride of Sodium, and, having rubbed it with the other ingredients until globules of Mercury cease to be visible, sublime the mixture. Reduce the sublimed matter to a very fine powder, wash it with boiling Distilled Water until the washings afford no precipitate with water of ammonia, and dry it.

A white or pale-buff powder, wholly volatilizable by heat, and insoluble in water, alcohol, and ether. With potassa it yields a black precipitate of oxide of mercury, which is reduced by heat to the metallic state. Distilled water, after having been boiled with it, yields no precipitate with ammonia or nitrate of silver.

HYDRARGYRI CYANIDUM.

Cyanide of Mercury.

Hydrargyri Cyanuretum, *Pharm.*, 1850.

Take of Ferrocyanide of Potassium five troy-ounces ;

Sulphuric Acid four troyounces and one hundred and twenty grains ;

Red Oxide of Mercury, in fine powder,
Water, each, a sufficient quantity.

Dissolve the Ferrocyanide of Potassium in twenty fluidounces of Water, and add the solution to the

Sulphuric Acid, previously diluted with ten fluidounces of Water, and contained in a glass retort. Distil the mixture nearly to dryness into a receiver, containing ten fluidounces of Water and three troyounces of Red Oxide of Mercury. Set aside two fluidounces of the distilled liquid, and to the remainder add, with agitation, sufficient Red Oxide to destroy the odour of hydrocyanic acid. Then filter the solution, and, having added the reserved liquid, evaporate the whole in a dark place, in order that crystals may form. Lastly, dry the crystals, and keep them in a well-stopped bottle, protected from the light.

In white prismatic crystals, wholly soluble in water. When muriatic acid is added to the solution, hydrocyanic acid is evolved, made evident by its odour, and bichloride of mercury is left, which is entirely volatilized by heat. When Cyanide of Mercury is heated, cyanogen is given off, and a blackish matter is left containing globules of mercury.

HYDRARGYRI IODIDUM RUBRUM.

Red Iodide of Mercury.

Take of Corrosive Chloride of Mercury a troyounce ;

Iodide of Potassium a troyounce and one hundred and twenty grains ;

Distilled Water a sufficient quantity.

Dissolve the Corrosive Chloride of Mercury in a pint and a half, and the Iodide of Potassium in half a pint of Distilled Water, and mix the solutions. Collect the precipitate upon a filter, and, having washed it with Distilled Water, dry it with a gentle heat, and keep it in a well-stopped bottle.

A red powder, which becomes yellow when heated, and red again when cold. It is wholly volatilized by heat, condensing in scales, which are at first yellow, but afterwards become red. It is insoluble in water, but is dissolved by boiling alcohol, and by solutions of iodide of potassium and chloride of sodium.

HYDRARGYRI IODIDUM VIRIDE.

Green Iodide of Mercury.

Hydrargyri Iodidum, *Pharm.*, 1850.

Take of Mercury a troyounce ;

Iodine three hundred grains ;

Stronger Alcohol a sufficient quantity.

Mix the Mercury and Iodine in a mortar, and, having added half a fluidounce of Stronger Alcohol, triturate the mixture until the ingredients are thoroughly incorporated. Stir the mixture occasionally, and, at the end of two hours, triturate again, with considerable pressure, until it is nearly dry. Then rub it up with Stronger Alcohol, gradually added, until it is reduced to a uniform thin paste ; and, having transferred this to a

filter, wash it with Stronger Alcohol until the washings cease to produce a permanent cloudiness when dropped into a large quantity of water. Lastly, dry the Iodide in the dark with a gentle heat, and keep it in a well-stopped bottle, protected from the light.

A greenish-yellow powder, which becomes red when heated. It is insoluble in water and alcohol. Official stronger alcohol, when shaken with it and separated by filtration, gives but a transient cloudiness on being dropped into water, and, when evaporated from a porcelain surface, leaves only a faint-red stain.

HYDRARGYRI OXIDUM RUBRUM.

Red Oxide of Mercury.

Red Precipitate.

Take of Mercury thirty-six troyounces ;
Nitric Acid twenty-four troyounces ;
Water two pints.

Dissolve the Mercury, with the aid of a gentle heat, in the Acid and Water previously mixed, and evaporate to dryness. Rub the dry mass into powder, and heat it in a very shallow vessel until red vapours cease to arise.

An orange-red powder, entirely soluble in muriatic acid. When heated it does not emit reddish fumes, but gives off oxygen ; while the mercury either runs into globules or is wholly dissipated.

HYDRARGYRI SULPHAS FLAVA.

*Yellow Sulphate of Mercury.*Hydrargyri Sulphas Flavus, *Pharm.*, 1850.*Turpeth Mineral.*

Take of Mercury four troyounces ;

Sulphuric Acid six troyounces.

Mix them in a glass vessel, and boil, by means of a sand-bath, until a dry white mass remains. Rub this into powder, and throw it into boiling water. Pour off the supernatant liquid, wash the yellow precipitate repeatedly with hot water, and dry it.

A lemon-yellow powder, sparingly soluble in water. It is entirely dissipated by heat, sulphurous acid being evolved, and globules of mercury sublimed.

HYDRARGYRI SULPHURETUM RUBRUM.

*Red Sulphuret of Mercury.**Cinnabar.*

Take of Mercury forty troyounces ;

Sublimed Sulphur eight troyounces.

To the Sulphur, previously melted, gradually add the Mercury, with constant stirring, and continue the heat until the mass begins to swell. Then remove the vessel from the fire, and cover it closely to prevent the contents from inflaming.

When the mass is cold, rub it into powder, and sublime.

In brilliant, crystalline masses, of a deep-red colour and fibrous texture. It is entirely volatilized by heat. When heated with potassa it yields globules of mercury. It is not soluble in either nitric or muriatic acid, but is dissolved by a mixture of these acids. Acetic acid which has been digested with it, does not yield a precipitate with iodide of potassium.

HYDRARGYRUM AMMONIATUM.

Ammoniated Mercury.

White Precipitate.

Take of Corrosive Chloride of Mercury six troy ounces ;

Water of Ammonia eight fluidounces ;

Distilled Water eight pints.

Dissolve the Corrosive Chloride of Mercury in the Distilled Water, with the aid of heat, and to the solution, when cold, add the Water of Ammonia, frequently stirring. Wash the precipitate with water until the washings become nearly tasteless, and dry it.

In white powder or pulverulent masses, decomposed and entirely dissipated by a strong heat, insoluble in water and alcohol, but dissolved without effervescence by muriatic acid. Acetic acid which has been digested with it, does not yield with iodide of potassium either a yellow or blue precipitate. It is not blackened when rubbed with lime-water. Heated with solution of potassa, it becomes yellow and evolves ammonia.

HYDRARGYRUM CUM CRETÂ.

Mercury with Chalk.

Take of Mercury three troyounces ;

Prepared Chalk five troyounces.

Rub them together until the globules cease to be visible, and the mixture acquires a uniform gray colour.

A gray powder, partly dissipated by heat. When a small portion is treated with dilute acetic acid in excess, it is partly dissolved, nothing remaining but mercury in the form of minute globules, visible by the aid of a magnifying glass. The solution, on the addition of muriatic acid, is rendered opalescent ; and, when filtered after this addition, and treated with hydrosulphuric acid, does not yield a black precipitate.

INFUSA.

INFUSUM ANGUSTURÆ.

Infusion of Angustura.

Take of Angustura, in moderately coarse powder, half a troyounce ;

Water a sufficient quantity.

Moisten the powder with two fluidrachms of Water, pack it firmly in a conical percolator, and gradually pour Water upon it until the filtered liquid measures a pint.

This Infusion may also be prepared by macerating the Angustura in a pint of boiling Water, for two hours, in a covered vessel, and straining.

INFUSUM ANTHEMIDIS.

Infusion of Chamomile.

Take of Chamomile half a troyounce ;

Boiling Water a pint.

Macerate for ten minutes in a covered vessel, and strain.

INFUSUM BUCHU.

Infusion of Buchu.

Take of Buchu a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM CALUMBÆ.

Infusion of Columbo.

Infusum Colombæ, *Pharm.*, 1850.

Take of Columbo, in moderately coarse powder, half a troyounce ;

Water a sufficient quantity.

Moisten the powder with two fluidrachms of Water, pack it firmly in a conical percolator, and

gradually pour Water upon it until the filtered liquid measures a pint.

This Infusion may also be prepared by macerating the Columbo in a pint of boiling Water, for two hours, in a covered vessel, and straining.

INFUSUM CAPSICI.

Infusion of Capsicum.

Take of Capsicum, in coarse powder, half a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM CARYOPHYLLI.

Infusion of Cloves.

Take of Cloves, bruised, one hundred and twenty grains ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM CASCARILLÆ.

Infusion of Cascarilla.

Take of Cascarilla, in moderately coarse powder, a troyounce ;

Water a sufficient quantity.

Moisten the powder with half a fluidounce of Water, pack it firmly in a conical percolator, and gradually pour Water upon it until the filtered liquid measures a pint.

This Infusion may also be prepared by macerating the Cascarilla with a pint of boiling Water, for two hours, in a covered vessel, and straining.

INFUSUM CATECHU COMPOSITUM.

Compound Infusion of Catechu.

Take of Catechu, in fine powder, half a troyounce;
Cinnamon, in moderately fine powder,
sixty grains;
Boiling Water a pint.

Macerate for an hour in a covered vessel, and strain.

INFUSUM CINCHONÆ FLAVÆ.

Infusion of Yellow Cinchona.

Take of Yellow Cinchona, in moderately fine powder, a troyounce;
Aromatic Sulphuric Acid a fluidrachm;
Water a sufficient quantity.

Mix the Acid with a pint of Water. Then moisten the powder with half a fluidounce of the mixture, and, having packed it firmly in a conical

glass percolator, gradually pour upon it the remainder of the mixture, and afterwards Water, until the filtered liquid measures a pint.

INFUSUM CINCHONÆ RUBRÆ.

Infusion of Red Cinchona.

Infusum Cinchonæ Compositum, *Pharm.*, 1850.

Take of Red Cinchona, in moderately fine powder, a troyounce ;

Aromatic Sulphuric Acid a fluidrachm ;

Water a sufficient quantity.

Mix the Acid with a pint of Water. Then moisten the powder with half a fluidounce of the mixture, and, having packed it firmly in a conical glass percolator, gradually pour upon it the remainder of the mixture, and afterwards Water, until the filtered liquid measures a pint.

INFUSUM DIGITALIS.

Infusion of Digitalis.

Take of Digitalis, in coarse powder, sixty grains ;

Tincture of Cinnamon a fluidounce ;

Boiling Water half a pint.

Macerate the Digitalis with the Water for two hours in a covered vessel, and strain ; then add the Tincture of Cinnamon, and mix.

INFUSUM EUPATORII.

Infusion of Thoroughwort.

Take of Thoroughwort a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM GENTIANÆ COMPOSITUM.

Compound Infusion of Gentian.

Take of Gentian, in moderately coarse powder,
half a troyounce ;

Bitter Orange Peel, in moderately coarse
powder,

Coriander, in moderately coarse powder,
each, sixty grains ;

Alcohol two fluidounces ;

Water a sufficient quantity.

Mix the Alcohol with fourteen fluidounces of Water, and, having moistened the mixed powders with three fluidrachms of the menstruum, pack them firmly in a conical percolator, and gradually pour upon them first the remainder of the menstruum, and afterwards Water, until the filtered liquid measures a pint.

INFUSUM HUMULI.

Infusion of Hops.

Take of Hops half a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM JUNIPERI.

Infusion of Juniper.

Take of Juniper, bruised, a troyounce ;

Boiling Water a pint.

Macerate for an hour in a covered vessel, and strain.

INFUSUM KRAMERLÆ.

Infusion of Rhatany.

Take of Rhatany, in moderately coarse powder,
a troyounce ;

Water a sufficient quantity.

Moisten the powder with half a fluidounce of Water, and, having packed it firmly in a conical glass percolator, gradually pour Water upon it until the filtered liquid measures a pint.

INFUSUM LINI COMPOSITUM.

Compound Infusion of Flaxseed.

Take of Flaxseed half a troyounce ;
Liquorice Root, bruised, one hundred
and twenty grains ;
Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM PAREIRÆ.

Infusion of Pareira Brava.

Take of Pareira Brava, bruised, a troyounce ;
Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM PICIS LIQUIDÆ.

*Infusion of Tar.**Tar Water.*

Take of Tar a pint ;
Water four pints.

Mix them, and shake the mixture frequently during twenty-four hours. Then pour off the infusion, and filter through paper.

INFUSUM PRUNI VIRGINIANÆ.

Infusion of Wild-cherry Bark.

Take of Wild-cherry Bark, in moderately coarse powder, half a troyounce ;

Water a sufficient quantity.

Moisten the powder with six fluidrachms of Water, let it stand for an hour, pack it gently in a conical glass percolator, and gradually pour Water upon it until the filtered liquid measures a pint.

INFUSUM QUASSIÆ.

Infusion of Quassia.

Take of Quassia, rasped, one hundred and twenty grains ;

Water a pint.

Macerate for twelve hours in a covered vessel, and strain.

INFUSUM RHEI.

Infusion of Rhubarb.

Take of Rhubarb, bruised, one hundred and twenty grains ;

Boiling Water half a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM ROSÆ COMPOSITUM.

Compound Infusion of Rose.

Take of Red Rose half a troyounce ;

Diluted Sulphuric Acid three fluidrachms ;

Sugar, in coarse powder, a troyounce and a half ;

Boiling Water two pints and a half.

Pour the Water upon the Rose in a covered glass or porcelain vessel ; then add the Acid, and macerate for half an hour. Lastly, strain the liquid, and in it dissolve the Sugar.

INFUSUM SALVIÆ.

Infusion of Sage.

Take of Sage half a troyounce ;

Boiling Water a pint.

Macerate for half an hour in a covered vessel, and strain.

INFUSUM SENNÆ.

Infusion of Senna.

Take of Senna a troyounce ;

Coriander, bruised, sixty grains ;

Boiling Water a pint.

Macerate for an hour in a covered vessel, and strain.

INFUSUM SERPENTARIÆ.

Infusion of Serpentaria.

Take of Serpentaria, in moderately coarse powder, half a troyounce ;

Water a sufficient quantity.

Moisten the powder with two fluidrachms of Water, pack it firmly in a conical percolator, and gradually pour Water upon it until the filtered liquid measures a pint.

This Infusion may also be prepared by macerating the Serpentaria with a pint of boiling Water, for two hours, in a covered vessel, and straining.

INFUSUM SPIGELLÆ.

Infusion of Spigelia.

Take of Spigelia half a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM TABACI.

Infusion of Tobacco.

Take of Tobacco sixty grains ;

Boiling Water a pint.

Macerate for an hour in a covered vessel, and strain.

INFUSUM TARAXACI.

Infusion of Dandelion.

Take of Dandelion, bruised, two troyounces ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

INFUSUM VALERIANÆ.

Infusion of Valerian.

Take of Valerian, in moderately coarse powder,
half a troyounce ;

Water a sufficient quantity.

Moisten the powder with two fluidrachms of Water, pack it firmly in a conical percolator, and gradually pour Water upon it until the filtered liquid measures a pint.

This Infusion may also be prepared by macerating the Valerian with a pint of boiling Water, for two hours, in a covered vessel, and straining.

INFUSUM ZINGIBERIS.

Infusion of Ginger.

Take of Ginger, bruised, half a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

LINIMENTA.

LINIMENTUM AMMONIÆ.

Liniment of Ammonia.

Take of Water of Ammonia a fluidounce ;

Olive Oil two troyounces.

Mix them.

LINIMENTUM CALCIS.

Lime Liniment.

Take of Solution of Lime eight fluidounces ;

Flaxseed Oil seven troyounces.

Mix them.

LINIMENTUM CAMPHORÆ.

Liniment of Camphor.

Take of Camphor three troyounces ;

Olive Oil twelve troyounces.

Dissolve the Camphor in the Oil.

LINIMENTUM CANTHARIDIS.

Liniment of Cantharides.

Take of Cantharides, in fine powder, a troyounce ;

Oil of Turpentine half a pint.

Digest the Cantharides with the Oil for three hours in a close vessel, by means of a water-bath, and strain.

LINIMENTUM CHLOROFORMI.

Liniment of Chloroform.

Take of Purified Chloroform three troyounces ;

Olive Oil four troyounces.

Mix them.

LINIMENTUM SAPONIS.

Soap Liniment.

Tinctura Saponis Camphorata, *Pharm.*, 1850.

Take of Soap, in shavings, four troyounces ;

Camphor two troyounces ;

Oil of Rosemary half a fluidounce ;

Water four fluidounces ;

Alcohol two pints.

Mix the Alcohol and Water, digest the Soap with the mixture, by means of a water-bath, until it is dissolved ; then filter, and, having added the Camphor and Oil, mix the whole thoroughly together.

LINIMENTUM TEREBINTHINÆ.

Liniment of Turpentine.

Take of Resin Cerate twelve troyounces;
Oil of Turpentine half a pint.

Add the Oil to the Cerate previously melted,
and mix them.

LIQUORES.

LIQUOR AMMONIÆ ACETATIS.

*Solution of Acetate of Ammonia.**Spirit of Mindererus.*

Take of Diluted Acetic Acid two pints;
Carbonate of Ammonia a sufficient
quantity.

Add the Carbonate gradually to the Acid until
this is saturated, and filter. This preparation,
when dispensed, should be freshly made.

A colourless liquid, which is not darkened by the action of hydro-
sulphuric acid, and does not yield a precipitate with nitrate of silver
or chloride of barium.

LIQUOR ARSENICI ET HYDRARGYRI IODIDI.

Solution of Iodide of Arsenic and Mercury.

Take of Iodide of Arsenic,

Red Iodide of Mercury, each, thirty-five grains ;

Distilled Water half a pint.

Rub the Iodides with half a fluidounce of the Water, and, when they have dissolved, add the remainder of the Water, and filter through paper.

LIQUOR BARI CHLORIDI.

Solution of Chloride of Barium.

Take of Chloride of Barium a troyounce ;

Distilled Water three fluidounces.

Dissolve the Chloride in the Distilled Water, and filter through paper.

LIQUOR CALCI CHLORIDI.

Solution of Chloride of Calcium.

Take of Marble, in small pieces, six troyounces ;

Muriatic Acid twelve troyounces ;

Distilled Water a sufficient quantity.

Mix the Acid with half a pint of Distilled Water, and gradually add the Marble. Towards the close of the effervescence apply a gentle heat, and, when the action has ceased, pour off the clear liquid, and evaporate to dryness. Dissolve the residue in one and a half times its weight of Distilled Water, and filter through paper.

LIQUOR CALCIS.

*Solution of Lime.**Lime-water.*

Take of Lime four troyounces ;

Distilled Water eight pints.

Upon the Lime, first slaked with a little of the Distilled Water, pour the remainder, and stir them together. Then immediately cover the vessel, and set it aside for three hours. Keep the solution, together with the undissolved Lime, in a well-stopped bottle, and pour off the clear liquid when wanted for use.

Water free from saline or other obvious impurity, though not distilled, may be employed in this process.

Solution of Lime becomes turbid when heated, and clear again on cooling. Its alkaline reaction disappears entirely, when an excess of carbonic acid has been passed through it, and the excess has been expelled by boiling.

LIQUOR FERRI CITRATIS.

Solution of Citrate of Iron.

Take of Citric Acid, in coarse powder, five troy-ounces and three hundred and sixty grains ;

Solution of Tersulphate of Iron a pint ;

Water of Ammonia,
Distilled Water, each, a sufficient quantity.

Dilute the Solution of Tersulphate of Iron with two pints of Distilled Water, add a slight excess of Water of Ammonia, with constant stirring, transfer the precipitate formed to a muslin strainer, and wash it with water until the washings are nearly tasteless. When the precipitate is drained, put half of it in a porcelain capsule on a water-bath, heated to 150° , add the Citric Acid, and stir the mixture until the precipitate is nearly dissolved. Then add so much of the reserved precipitate as may be necessary fully to saturate the Acid. Lastly, filter the liquid, and evaporate it, at a temperature not exceeding 150° , until it is reduced to the measure of a pint.

LIQUOR FERRI NITRATIS.

Solution of Nitrate of Iron.

Take of Iron, in the form of wire and cut in pieces, two troyounces and a half;
Nitric Acid five troyounces;
Distilled Water a sufficient quantity.

Mix the Iron with twelve fluidounces of Distilled Water in a wide-mouthed bottle, and add to

the mixture, in small portions at a time, with frequent agitation, three troyounces of the Nitric Acid, previously mixed with six fluidounces of Distilled Water, moderating the reaction by setting the vessel in cold water, in order to prevent the occurrence of red fumes. When the effervescence has nearly ceased, agitate the solution with the undissolved Iron until a portion of the liquid, on being filtered, exhibits a pale-green colour. Then filter the liquid, and, having poured it into a capacious porcelain capsule, heat it to the temperature of 130° , and add the remainder of the Nitric Acid. When the effervescence has ceased, continue the heat until no more gas escapes, and then add sufficient Distilled Water to bring the liquid to the measure of thirty-six fluidounces.

A transparent liquid, having a pale-amber colour, and a specific gravity between 1.060 and 1.070. It does not afford a blue precipitate with ferridecyanide of iron. A fluidounce of it, on the addition of ammonia in excess, yields a reddish-brown precipitate, which, when washed, dried, and ignited, weighs between eight and ten grains.

LIQUOR FERRI SUBSULPHATIS.

Solution of Subsulphate of Iron.

Solution of Persulphate of Iron.—Monsel's Solution.

Take of Sulphate of Iron, in coarse powder,
twelve troyounces ;

Sulphuric Acid a troyounce and thirty grains ;

Nitric Acid a troyounce and three hundred grains ;

Distilled Water a sufficient quantity.

Mix the Acids with half a pint of Distilled Water in a capacious porcelain capsule, and, having heated the mixture to the boiling point, add the Sulphate of Iron, one-fourth at a time, stirring after each addition until effervescence ceases. Then keep the solution in brisk ebullition until nitrous vapours are no longer perceptible, and the colour assumes a deep ruby-red tint. Lastly, when the liquid is nearly cold, add sufficient Distilled Water to make it measure twelve fluidounces.

An inodorous, syrupy liquid, of a ruby-red colour, and of an extremely astringent taste, without causticity. Its specific gravity is 1.552. It mixes with water and with alcohol in all proportions without decomposition, and yields, with ammonia, a bulky reddish-brown precipitate. By evaporating a portion of it on a glass surface with a moderate heat, the salt may be obtained in transparent scales, which are deliquescent, and readily soluble in water.

LIQUOR FERRI TERSULPHATIS.

Solution of Tersulphate of Iron.

Take of Sulphate of Iron, in coarse powder,
twelve troyounces ;

Sulphuric Acid two troyounces and
sixty grains ;

Nitric Acid a troyounce and three
hundred and sixty grains ;

Water a sufficient quantity.

Mix the Acids with half a pint of Water in a capacious porcelain capsule, and, having heated the mixture to the boiling point, add the Sulphate of Iron, one-fourth at a time, stirring after each addition until effervescence ceases. Then continue the heat until the solution acquires a reddish-brown colour, and is free from nitrous odour. Lastly, when the liquid is nearly cold, add sufficient Water to make it measure a pint and a half.

A dark, reddish-brown liquid, nearly devoid of odour, and of an acid and extremely styptic taste. Its specific gravity is 1.320. It mixes with water and with alcohol in all proportions without decomposition. A fluidounce of it yields, on the addition of ammonia in excess, a bulky reddish-brown precipitate, which is free from black discoloration, and which, when washed, dried, and ignited, weighs sixty-nine grains.

LIQUOR GUTTA-PERCHÆ.

Solution of Gutta-percha.

Take of Gutta-percha, in thin slices, a troyounce and a half;

Purified Chloroform seventeen troy-ounces;

Carbonate of Lead, in fine powder, two troyounces.

To twelve troyounces of the Chloroform, contained in a bottle, add the Gutta-percha, and shake occasionally until it is dissolved. Then add the Carbonate of Lead, previously mixed with the remainder of the Chloroform, and, having several times shaken the whole together at intervals of half an hour, set the mixture aside, and let it stand for ten days, or until the insoluble matter has subsided, and the solution become limpid, and either colourless or of a pale-straw colour. Lastly, decant the liquid, and keep it in a well-stopped bottle.

LIQUOR HYDRARGYRI NITRATIS.*Solution of Nitrate of Mercury.*

Take of Mercury three troyounces;

Nitric Acid five troyounces;

Distilled Water six fluidrachms.

Dissolve the Mercury, with the aid of a gentle heat, in the Acid, previously mixed with the Distilled Water. When reddish vapours cease to arise, evaporate the liquid to seven troyounces and a half, and keep it in a well-stopped bottle.

A transparent, nearly colourless, acid liquid, having the specific gravity 2.165. It is not precipitated by the addition of distilled water; and the diluted solution affords with potassa, a dirty-yellow precipitate, and with iodide of potassium, a bright-red one, soluble in an excess of the precipitant. When dropped on a bright surface of copper, the diluted solution instantly deposits a coating of mercury.

LIQUOR IODINII COMPOSITUS.

Compound Solution of Iodine.

Take of Iodine three hundred and sixty grains;
Iodide of Potassium a troyounce and a half;
Distilled Water a pint.

Dissolve the Iodine and Iodide of Potassium in the Distilled Water.

LIQUOR MAGNESIÆ CITRATIS.

Solution of Citrate of Magnesia.

Take of Magnesia one hundred and twenty grains;

Citric Acid four hundred and fifty grains ;

Syrup of Citric Acid two fluidounces ;

Bicarbonate of Potassa forty grains ;

Water a sufficient quantity.

Dissolve the Citric Acid in four fluidounces of Water, and, having added the Magnesia, stir until it is dissolved. Filter the solution into a strong twelve-ounce bottle, containing the Syrup of Citric Acid. Then add the Bicarbonate of Potassa, and sufficient Water to nearly fill the bottle, which must be closed with a cork, secured with twine. Lastly, shake the mixture occasionally until the Bicarbonate is dissolved.

LIQUOR MORPHIÆ SULPHATIS.

Solution of Sulphate of Morphia.

Take of Sulphate of Morphia eight grains ;

Distilled Water half a pint.

Dissolve the Sulphate of Morphia in the Distilled Water.

LIQUOR PLUMBI SUBACETATIS.

Solution of Subacetate of Lead.

Take of Acetate of Lead sixteen troyounces ;

Oxide of Lead, in fine powder, nine
troyounces and a half;

Distilled Water a sufficient quantity.

Boil the Acetate and Oxide with four pints of
Distilled Water, in a glass or porcelain vessel,
for half an hour, occasionally adding Distilled
Water to preserve the measure, and filter through
paper. Lastly, keep the liquid in a well-stopped
bottle.

A colourless liquid, of the specific gravity 1.267. It is decomposed
by exposure to the air, carbonate of lead being formed. When
added to a solution of gum, it occasions a dense white precipitate.
In other respects it possesses the properties of an aqueous solution
of acetate of lead. (See *Plumbi Acetas*.)

LIQUOR PLUMBI SUBACETATIS DILUTUS.

Diluted Solution of Subacetate of Lead.

Lead-water.

Take of Solution of Subacetate of Lead three
fluidrachms;

Distilled Water a pint.

Mix them.

LIQUOR POTASSÆ.

Solution of Potassa.

Take of Bicarbonate of Potassa fifteen troy-
ounces;

Lime nine troyounces ;

Distilled Water a sufficient quantity.

Dissolve the Bicarbonate in four pints of Distilled Water, and heat the solution until effervescence ceases. Then add Distilled Water to make up the loss by evaporation, and heat the solution to the boiling point. Mix the Lime with four pints of Distilled Water, and, having heated the mixture to the boiling point, add it to the alkaline solution, and boil for ten minutes. Then transfer the whole to a muslin strainer, and, when the liquid portion has passed, add sufficient Distilled Water, through the strainer, to make the strained liquid measure seven pints. Lastly, keep the liquid in well-stopped bottles of green glass.

Solution of Potassa, thus prepared, has the specific gravity 1.065, and contains five and eight-tenths per cent. of hydrate of potassa.

Solution of Potassa may also be prepared in the following manner.

Take of Potassa a troyounce ;

Distilled Water a pint.

Dissolve the Potassa in the Distilled Water, and allow the solution to stand until the sediment subsides. Then pour off the clear liquid,

and keep it in a well-stopped bottle of green glass.

A colourless liquid, having an extremely acrid taste, and a strong alkaline reaction. It causes no effervescence when added to a dilute acid, and yields a yellow precipitate with bichloride of platinum. When saturated with dilute nitric acid, it gives no precipitate, or only a slight one, with carbonate of soda, chloride of barium, or nitrate of silver.

LIQUOR POTASSÆ ARSENITIS.

Solution of Arsenite of Potassa.

- Take of Arsenious Acid, in small pieces,
Bicarbonate of Potassa, each, sixty-four
grains;
+ Compound Spirit of Lavender half a
fluidounce;
Distilled Water a sufficient quantity.

Boil the Arsenious Acid and Bicarbonate of Potassa, in a glass vessel, with twelve fluidounces of Distilled Water, until the Acid is entirely dissolved. To the solution, when cold, add the Compound Spirit of Lavender, and afterwards sufficient Distilled Water to make it measure a pint.

LIQUOR POTASSÆ CITRATIS.

Solution of Citrate of Potassa.

Take of Citric Acid half a troyounce;

Bicarbonate of Potassa three hundred
and thirty grains ;

Water half a pint.

Dissolve the Acid and Bicarbonate in the Water,
and strain the solution through muslin.

LIQUOR SODÆ.

Solution of Soda.

Take of Carbonate of Soda twenty-six troy-
ounces ;

Lime eight troyounces ;

Distilled Water a sufficient quantity.

Dissolve the Carbonate in three pints and a half of Distilled Water, and heat the solution to the boiling point. Mix the Lime with three pints of Distilled Water, and, having heated the mixture to the boiling point, add it to the solution of the Carbonate, and boil for ten minutes. Then transfer the whole to a muslin strainer, and, when the liquid portion has passed, add sufficient Distilled Water, through the strainer, to make the strained liquid measure six pints. Lastly, keep the liquid in well-stopped bottles of green glass.

Solution of Soda has the specific gravity 1.071,

and contains five and seven-tenths per cent. of hydrate of soda.

A colourless liquid, having an extremely acrid taste, and a strong alkaline reaction. It causes no effervescence when added to a dilute acid, and yields no precipitate with bichloride of platinum. When saturated with dilute nitric acid, it gives no precipitate, or only a slight one, with carbonate of soda, chloride of barium, or nitrate of silver.

LIQUOR SODÆ CHLORINATÆ.

Solution of Chlorinated Soda.

Take of Chlorinated Lime twelve troyounces ;
Carbonate of Soda twenty-four troy-
ounces ;
Water twelve pints. .

Dissolve the Carbonate of Soda in three pints of the Water, with the aid of heat. Triturate the Chlorinated Lime, a little at a time, with small portions of the Water, gradually added, until a smooth, uniform mixture is obtained. Mix this intimately with the remainder of the Water, and set the mixture aside for twenty-four hours. Then decant the clear liquid, and, having transferred the residue to a muslin strainer, allow it to drain until sufficient liquid has passed to make, with the decanted liquid, eight pints. Mix this thoroughly with the solution of Carbonate of Soda,

transfer the mixture to a muslin strainer, and allow it to drain, adding water, if necessary, towards the close, until eleven pints and a half of liquid have passed. Lastly, keep the liquid in well-stopped bottles, protected from the light.

A transparent liquid, of a greenish-yellow colour, having a slight odour of chlorine, and a sharp, saline taste. Its specific gravity is 1.045. It rapidly decolorizes solution of indigo, and produces a copious, light-brown precipitate with solution of sulphate of iron.

MAGNESIUM.

MAGNESIA.

Magnesia.

Take of Carbonate of Magnesia a convenient quantity.

Put it into an earthen vessel, and expose it to a red heat for two hours, or until the carbonic acid is entirely expelled.

Magnesia is wholly dissolved, without effervescence, by dilute muriatic acid; and the solution yields no precipitate with oxalate of ammonia or chloride of barium.

M E L L I T A.

MEL DESPUMATUM.*Clarified Honey.*

Take of Honey a convenient quantity.

Melt it by means of a water-bath, and then remove the scum.

MEL ROSÆ.

Honey of Rose.

Take of Red Rose, in moderately fine powder,
two troyounces ;

Clarified Honey twenty-five troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with half a fluidounce of Diluted Alcohol, pack it firmly in a conical glass percolator, and gradually pour Diluted Alcohol upon it until six fluidrachms of filtered liquid have passed. Set this aside, and continue the percolation until half a pint more of liquid is obtained. Evaporate this, by means of a water-bath, to ten fluidrachms, add the reserved liquid, and mix the whole with the Clarified Honey.

MEL SODÆ BORATIS.

Honey of Borate of Soda.

Take of Borate of Soda, in fine powder, sixty grains;

Clarified Honey a troyounce.

Mix them.

MISTURÆ.

MISTURA AMMONIACI.

Mixture of Ammoniac.

Take of Ammoniac one hundred and twenty grains;

Water half a pint.

Rub the Ammoniac with the Water, gradually added, until they are thoroughly mixed, and strain.

MISTURA AMYGDALÆ.

Mixture of Almond.

Take of Sweet Almond half a troyounce;

Gum Arabic, in fine powder, thirty grains;

Sugar one hundred and twenty grains;

Distilled Water eight fluidounces.

Having blanched the Almond, beat it with the Gum Arabic and Sugar, in a mortar, until they are thoroughly mixed; then rub the mixture with the Distilled Water, gradually added, and strain.

MISTURA ASSAFETIDÆ.

Mixture of Assafetida.

Take of Assafetida one hundred and twenty grains;

Water half a pint.

Rub the Assafetida with the Water, gradually added, until they are thoroughly mixed.

MISTURA CHLOROFORMI.

Mixture of Chloroform.

Take of Purified Chloroform half a troyounce;

Camphor sixty grains;

The yolk of one Egg;

Water six fluidounces.

Rub the yolk in a mortar, first by itself, then with the Camphor, previously dissolved in the Chloroform, and, lastly, with the Water, gradually added, so as to make a uniform mixture.

MISTURA CRETÆ.

Chalk Mixture.

Take of Prepared Chalk half a troyounce ;
Sugar,
Gum Arabic, in fine powder, each, one
hundred and twenty grains ;
Cinnamon Water,
Water, each, four fluidounces.

Rub them together until they are thoroughly mixed.

MISTURA FERRI COMPOSITA.

Compound Mixture of Iron.

Take of Myrrh,
Sugar, each, sixty grains ;
Carbonate of Potassa twenty-five grains ;
Sulphate of Iron, in coarse powder,
twenty grains ;
Spirit of Lavender half a fluidounce ;
Rose Water seven fluidounces and a
half.

Rub the Myrrh, Sugar, and Carbonate of Potassa with the Rose Water, gradually added, then with the Spirit of Lavender, and, lastly, with the Sulphate of Iron ; and pour the mixture immediately into a bottle, which must be well stopped.

MISTURA GLYCYRRHIZÆ COMPOSITA.

*Compound Mixture of Liquorice.**Brown Mixture.*

Take of Liquorice, in fine powder,
Sugar, in coarse powder,
Gum Arabic, in fine powder, each, half
a troyounce ;
Camphorated Tincture of Opium two
fluidounces ;
Wine of Antimony a fluidounce ;
Spirit of Nitrous Ether half a fluid-
ounce ;
Water twelve fluidounces.

Rub the Liquorice, Sugar, and Gum Arabic with
the Water, gradually added ; then add the other
ingredients, and mix the whole together.

MISTURA POTASSÆ CITRATIS.

*Mixture of Citrate of Potassa.*Liquor Potassæ Citratis,* *Pharm.*, 1850.*Neutral Mixture.*

Take of Lemon Juice, fresh, half a pint ;

* The former name of this preparation, as prepared by the first formula given in the Pharmacopœia of 1850. It is still retained as the name of the preparation when made by the second formula, as amended in the present revised edition. See page 228.

Bicarbonate of Potassa a sufficient quantity.

Add the Bicarbonate gradually to the Lemon Juice until the acid is completely saturated; then strain through muslin.

M O R P H I A.

MORPHIA.

Morphia.

Take of Opium, sliced, twelve troyounces;
Water of Ammonia six fluidounces;
Animal Charcoal, in fine powder,
Alcohol,
Distilled Water, each, a sufficient quantity.

Macerate the Opium with four pints of Distilled Water for twenty-four hours, and, having worked it with the hands, again macerate for twenty-four hours, and strain. In like manner, macerate the residue twice successively with the same quantity of Distilled Water, and strain. Mix the infusions, evaporate to six pints, and filter; then add five pints of Alcohol, and afterwards three fluidounces of the Water of Ammonia, previously mixed with

half a pint of Alcohol. After twenty-four hours, pour in the remainder of the Water of Ammonia, mixed, as before, with half a pint of Alcohol, and set the liquid aside for twenty-four hours that crystals may form. To purify these, boil them with two pints of Alcohol until they are dissolved, filter the solution, while hot, through Animal Charcoal, and set it aside to crystallize.

Morphia, thus prepared, is in colourless crystals, which are inflammable, and wholly dissipated by a red heat. It is scarcely soluble in cold water, slightly soluble in boiling water, and freely so in boiling alcohol. Nitric acid first reddens it, and afterwards renders it yellow. With solution of sesquichloride of iron it assumes a deep-blue colour. Its solution restores the colour of litmus, previously reddened by an acid.

MORPHIÆ ACETAS.

Acetate of Morphia.

Take of Morphia, in fine powder, freed from narcotina by the action of Ether, a troyounce;

Distilled Water half a pint;

Acetic Acid a sufficient quantity.

Mix the Morphia with the Distilled Water; then carefully drop in Acetic Acid, constantly stirring, until the Morphia is saturated and dissolved. Evaporate the solution, by means of a

water-bath, to the consistence of syrup, and set it aside until it concretes. Lastly, dry the salt with a gentle heat, and rub it into powder.

A white powder, wholly soluble in water and in alcohol. From its solution potassa throws down a precipitate, which is dissolved by an excess of the alkali. It is affected by heat, nitric acid, and sesquichloride of iron in the same manner as Morphia. When sulphuric acid is added to the salt, acetous vapours are evolved.

MORPHIÆ MURIAS.

Muriate of Morphia.

Take of Morphia, in fine powder, a troyounce ;
Distilled Water half a pint ;
Muriatic Acid a sufficient quantity.

Mix the Morphia with the Distilled Water ; then carefully drop in Muriatic Acid, constantly stirring, until the Morphia is saturated and dissolved. Evaporate the solution, by means of a water-bath, so that on cooling it may crystallize. Lastly, drain the crystals, and dry them on bibulous paper.

In snow-white, feathery crystals, wholly soluble in water and in alcohol. Potassa, added to the solution, throws down a precipitate, which is dissolved by an excess of the alkali. With nitrate of silver it yields a precipitate, insoluble in nitric or muriatic acid, but soluble in an excess of ammonia. It is affected by heat, nitric acid, and sesquichloride of iron in the same manner as Morphia.

MORPHIÆ SULPHAS.

Sulphate of Morphia.

Take of Morphia, in fine powder, a troyounce;
Distilled Water half a pint;
Diluted Sulphuric Acid a sufficient
quantity.

Mix the Morphia with the Distilled Water; then carefully drop in Diluted Sulphuric Acid, constantly stirring, until the Morphia is saturated and dissolved. Evaporate the solution, by means of a water-bath, so that on cooling it may crystallize. Lastly, drain the crystals, and dry them on bibulous paper.

In snow-white, feathery crystals, which are wholly soluble in water. Potassa, added to the solution, throws down a precipitate, which is dissolved by an excess of the alkali. With chloride of barium it yields a white precipitate insoluble in nitric acid. It is affected by heat, nitric acid, and sesquichloride of iron in the same manner as Morphia.

MUCILAGINES.

MUCILAGO ACACIÆ.

Mucilage of Gum Arabic.

Take of Gum Arabic, in pieces, four troyounces;
Water half a pint.

Add the Water to the Gum Arabic, agitate occasionally until it is dissolved, and strain.

MUCILAGO SASSAFRAS.

Mucilage of Sassafras.

Infusum Sassafras Medullæ, *Pharm.*, 1850.

Take of Sassafras Pith one hundred and twenty grains ;

Water a pint.

Macerate for three hours, and strain.

MUCILAGO TRAGACANTHÆ.

Mucilage of Tragacanth.

Take of Tragacanth a troyounce ;

Boiling Water a pint.

Macerate the Tragacanth with the Water for twenty-four hours, occasionally stirring ; then rub them together so as to render the mixture uniform, and strain forcibly through muslin.

MUCILAGO ULMI.

Mucilage of Slippery-elm Bark.

Infusum Ulmi, *Pharm.*, 1850.

Take of Slippery-elm Bark, sliced and bruised, a troyounce ;

Boiling Water a pint.

Macerate for two hours in a covered vessel, and strain.

OLEA DESTILLATA.

The Distilled Oils, when dropped on paper, produce a greasy stain, which entirely disappears on exposure to a moderate heat. When shaken with water in a graduated tube and allowed to separate, they are not diminished in volume. Dry acetate of potassa, or solid chloride of calcium, is not liquefied on being agitated with them.

Most of the Distilled Oils are prepared by the following general formula.

Put the substance from which the Oil is to be extracted into a retort, or other vessel suitable for distillation, and add enough water to cover it; then distil by a regulated heat into a large refrigerator. Separate the Distilled Oil from the water which comes over with it.

OLEUM ANISI.

Oil of Anise.

Prepare this Oil from Anise, bruised, by the general formula given above.

OLEUM CARI.

Oil of Caraway.

Prepare this Oil from Caraway, bruised, by the general formula given at page 242.

OLEUM CARYOPHYLLI.

Oil of Cloves.

Prepare this Oil from Cloves, bruised, by the general formula given at page 242.

OLEUM CHENOPODII.

Oil of Wormseed.

Prepare this Oil from Wormseed by the general formula given at page 242.

OLEUM COPAIBÆ.

Oil of Copaiba.

Take of Copaiba twelve troyounces;

Water sixteen pints.

Add the Copaiba to the Water in a tinned still, and, having adapted a proper refrigeratory, distil twelve pints. Separate the Oil which comes over from the water, return this to the still, and again distil twelve pints. Lastly, separate the Oil procured in the second distillation, add it to that

first obtained, and keep the whole in a well-stopped bottle.

OLEUM CUBEBAE.

Oil of Cubeb.

Prepare this Oil from Cubeb, bruised, by the general formula given at page 242.

OLEUM ERIGERONTIS CANADENSIS.

Oil of Canada Fleabane.

Prepare this Oil from Canada Fleabane by the general formula given at page 242.

OLEUM FENICULI.

Oil of Fennel.

Prepare this Oil from Fennel, bruised, by the general formula given at page 242.

OLEUM GAULTHERIAE.

Oil of Gaultheria.

Prepare this Oil from fresh Gaultheria by the general formula given at page 242.

OLEUM HEDEOMÆ.

Oil of Hedeoma.

Prepare this Oil from Hedeoma by the general formula given at page 242.

OLEUM JUNIPERI.

Oil of Juniper.

Prepare this Oil from Juniper, bruised, by the general formula given at page 242.

OLEUM LAVANDULÆ.

Oil of Lavender.

Prepare this Oil from Lavender by the general formula given at page 242.

OLEUM MENTHÆ PIPERITÆ.

Oil of Peppermint.

Prepare this Oil from fresh Peppermint by the general formula given at page 242.

OLEUM MENTHÆ VIRIDIS.

Oil of Spearmint.

Prepare this Oil from fresh Spearmint by the general formula given at page 242.

OLEUM MONARDÆ.

Oil of Horsemint.

Prepare this Oil from fresh Horsemint by the general formula given at page 242.

OLEUM PIMENTÆ.

Oil of Pimento.

Prepare this Oil from Pimento, bruised, by the general formula given at page 242.

OLEUM ROSMARINI.

Oil of Rosemary.

Prepare this Oil from Rosemary by the general formula given at page 242.

OLEUM SABINÆ.

Oil of Savine.

Prepare this Oil from Savine, bruised, by the general formula given at page 242.

OLEUM SASSAFRAS.

Oil of Sassafras.

Prepare this Oil from Bark of Sassafras Root, bruised, by the general formula given at page 242.

OLEUM SUCCINI RECTIFICATUM.

Rectified Oil of Amber.

Take of Oil of Amber a pint;
Water six pints.

Mix them in a glass retort, and distil until four pints of water have passed with the Oil into the receiver; then separate the Oil from the water, and keep it in a well-stopped bottle.

OLEUM TABACI.

Oil of Tobacco.

Take of Tobacco, in coarse powder, twelve troy-ounces.

Put it into a retort of green glass, connected with a refrigerated receiver, to which a tube is attached for the escape of the incondensable products. Then, by means of a sand-bath, heat the retort gradually to dull redness, and maintain it at that temperature until empyreumatic oil ceases to come over. Lastly, separate the dark oily liquid in the receiver from the watery portion, and keep it in a well-stopped bottle.

OLEUM VALERIANÆ.

Oil of Valerian.

Prepare this Oil from Valerian, bruised, by the general formula given at page 242.

OLEORESINÆ.

OLEORESINA CAPSICI.

Oleoresin of Capsicum.

Take of Capsicum, in fine powder, twelve troy-ounces ;

Ether a sufficient quantity.

Put the Capsicum into a cylindrical percolator, press it firmly, and gradually pour Ether upon it until twenty-four fluidounces of filtered liquid have passed. Recover from this, by distillation on a water-bath, eighteen fluidounces of ether, and expose the residue, in a capsule, until the remaining ether has evaporated. Lastly, remove, by straining, the fatty matter which separates on standing, and keep the Oleoresin in a well-stopped bottle.

OLEORESINA CUBEÆ.

Oleoresin of Cubeb.

Extractum Cubeæ Fluidum, *Pharm.*, 1850.

Take of Cubeb, in fine powder, twelve troyounces ;

Ether a sufficient quantity.

Put the Cubeb into a cylindrical percolator, press it moderately, and gradually pour Ether upon it until twenty-four fluidounces of filtered

liquid have passed. Recover from this, by distillation on a water-bath, eighteen fluidounces of ether, and expose the residue, in a capsule, until the remaining ether has evaporated. Lastly, keep the Oleoresin in a well-stopped bottle.

OLEORESINA LUPULINÆ.

Oleoresin of Lupulin.

Take of Lupulin twelve troyounces;
Ether a sufficient quantity.

Put the Lupulin into a narrow cylindrical percolator, press it firmly, and gradually pour Ether upon it until thirty fluidounces of filtered liquid have passed. Recover from this, by distillation on a water-bath, eighteen fluidounces of ether, and expose the residue, in a capsule, until the remaining ether has evaporated. Lastly, keep the Oleoresin in a wide-mouthed bottle, well stopped.

OLEORESINA PIPERIS.

Oleoresin of Black Pepper.

Extractum Piperis Fluidum, *Pharm.*, 1850.

Take of Black Pepper, in fine powder, twelve troyounces;
Ether a sufficient quantity.

Put the Black Pepper into a cylindrical perco-

lator, press it firmly, and gradually pour Ether upon it until twenty-four fluidounces of filtered liquid have passed. Recover from this, by distillation on a water-bath, eighteen fluidounces of ether, and expose the residue, in a capsule, until the remaining ether has evaporated, and the deposition of piperin in crystals has ceased. Lastly, separate the Oleoresin from the piperin by expression through a muslin strainer, and keep it in a well-stopped bottle.

OLEORESINA ZINGIBERIS.

Oleoresin of Ginger.

Take of Ginger, in fine powder, twelve troy-ounces;

Stronger Ether twelve fluidounces;

Alcohol a sufficient quantity.

Put the Ginger into a cylindrical percolator, press it firmly, and pour upon it the Stronger Ether. When this has been absorbed by the powder, add Alcohol until twelve fluidounces of filtered liquid have passed. Recover from this, by distillation on a water-bath, nine fluidounces of ether, and expose the residue, in a capsule, until the volatile part has evaporated. Lastly, keep the Oleoresin in a well-stopped bottle.

P I L U L Æ.

PILULÆ ALOËS.

Pills of Aloes.

Take of Socotrine Aloes, in fine powder,
Soap, in fine powder, each, a troyounce.

Beat them together with water so as to form a pilular mass, to be divided into two hundred and forty pills.

PILULÆ ALOËS ET ASSAFÆTIDÆ.

Pills of Aloes and Assafetida.

Take of Socotrine Aloes, in fine powder,
Assafetida,
Soap, in fine powder, each, half a troy-ounce.

Beat them together with water so as to form a pilular mass, to be divided into one hundred and eighty pills.

PILULÆ ALOËS ET MASTICHES.

Pills of Aloes and Mastic.

Take of Socotrine Aloes, in fine powder, a troy-ounce and a half;
Mastic, in fine powder,

Red Rose, in fine powder, each, half a troyounce.

Beat them together with water so as to form a pilular mass, to be divided into four hundred pills.

PILULÆ ALOËS ET MYRRHÆ.

Pills of Aloes and Myrrh.

Take of Socotrine Aloes, in fine powder, two troyounces ;

Myrrh, in fine powder, a troyounce ;

Saffron, in fine powder, half a troyounce ;

Syrup a sufficient quantity.

Beat the whole together so as to form a pilular mass, to be divided into four hundred and eighty pills.

PILULÆ ANTIMONII COMPOSITÆ.

Compound Pills of Antimony.

Plummer's Pills.

Take of Sulphurated Antimony,

Mild Chloride of Mercury, each, one hundred and twenty grains ;

Guaiac, in fine powder,

Molasses, each, half a troyounce.

Rub the Sulphurated Antimony first with the

Mild Chloride of Mercury, and afterwards with the Guaiac and Molasses, so as to form a pilular mass, to be divided into two hundred and forty pills.

PILULÆ ASSAFETIDÆ.

Pills of Assafetida.

Take of Assafetida a troyounce and a half;

Soap, in fine powder, half a troyounce.

Beat them together with water so as to form a pilular mass, to be divided into two hundred and forty pills.

PILULÆ CATHARTICÆ COMPOSITÆ.

Compound Cathartic Pills.

Take of Compound Extract of Colocynth half a troyounce ;

Extract of Jalap, in fine powder,

Mild Chloride of Mercury, each, one hundred and eighty grains ;

Gamboge, in fine powder, forty grains.

Mix the powders together; then with water form a pilular mass, to be divided into one hundred and eighty pills.

PILULÆ COPAIBÆ.

Pills of Copaiba.

Take of Copaiba two troyounces ;

Magnesia, recently prepared, sixty grains.

Mix them together, and set the mixture aside until it concretes into a pilular mass, to be divided into two hundred pills.

PILULÆ FERRI CARBONATIS.

Pills of Carbonate of Iron.

Take of Sulphate of Iron eight troyounces;
Carbonate of Soda nine troyounces;
Clarified Honey three troyounces;
Sugar, in coarse powder, two troy-
ounces;
Boiling Water two pints;
Syrup a sufficient quantity.

Dissolve the salts separately, each in a pint of the Water, a fluidounce of Syrup having been previously added to each pint. Mix the two solutions, when cold, in a bottle just large enough to hold them, close it accurately with a stopper, and set it by that the carbonate of iron may subside. Pour off the supernatant liquid, and, having mixed water, recently boiled, with Syrup in the proportion of a pint to the fluidounce, wash the precipitate with the mixture until the washings no longer have a saline taste. Place the precipitate

on a flannel cloth to drain, and, having expressed as much of the water as possible, mix it immediately with the Clarified Honey and Sugar. Lastly, by means of a water-bath, evaporate the mixture, constantly stirring, until it is brought to the weight of eight troyounces.

PILULÆ FERRI COMPOSITÆ.

Compound Pills of Iron.

Take of Myrrh, in fine powder, one hundred and twenty grains;

Carbonate of Soda,

Sulphate of Iron, each, sixty grains;

Syrup a sufficient quantity.

Rub the Myrrh, first with the Carbonate of Soda, and afterwards with the Sulphate of Iron, until they are thoroughly mixed; then beat them with Syrup so as to form a pilular mass, to be divided into eighty pills.

PILULÆ FERRI IODIDI.

Pills of Iodide of Iron.

Take of Iodine half a troyounce;

Iron, in the form of wire and cut in pieces, one hundred and twenty grains;

Sugar, in fine powder, a troyounce ;
Marshmallow, in fine powder, half a
troyounce ;
Gum Arabic, in fine powder,
Reduced Iron, each, sixty grains ;
Water ten fluidrachms.

Mix the Iodine with a fluidounce of the Water in a thin-glass bottle, add the Iron, and shake them together until a clear, green solution is obtained. Mix the powders in a small porcelain capsule, and filter upon them, through a small filter, first the solution previously heated, and afterwards the remainder of the Water in order to wash the filter. Then, by means of a water-bath, with constant stirring, evaporate the whole to a pilular consistence, and divide the mass into three hundred pills.

Dissolve sixty grains of Balsam of Tolu in a fluidrachm of Ether, shake the pills with the solution until they are uniformly coated, and put them on a plate to dry, occasionally stirring them until the drying is completed. Lastly, keep the pills in a well-stopped bottle.

These pills are devoid of the smell of iodine ; and distilled water, rubbed with them and filtered, does not colour solution of starch, or gives it only a slight blue tint.

PILULÆ GALBANI COMPOSITÆ.

Compound Pills of Galbanum.

Take of Galbanum,

Myrrh, each, three hundred and sixty grains;

Assafetida one hundred and twenty grains;

Syrup a sufficient quantity.

Beat them together so as to form a pilular mass, to be divided into two hundred and forty pills.

PILULÆ HYDRARGYRI.

*Pills of Mercury.**Blue Pills.*

Take of Mercury a troyounce;

Confection of Rose a troyounce and a half;

Liquorice Root, in fine powder, half a troyounce.

Rub the Mercury with the Confection until the globules cease to be visible; then add the Liquorice Root, and beat the whole into a pilular mass, to be divided into four hundred and eighty pills.

PILULÆ OPII.

Pills of Opium.

Take of Opium, in fine powder, sixty grains ;
Soap, in fine powder, twelve grains.

Beat them together with water so as to form a pilular mass, to be divided into sixty pills.

PILULÆ QUINIÆ SULPHATIS.

Pills of Sulphate of Quinia.

Take of Sulphate of Quinia a troyounce ;
Gum Arabic, in fine powder, one hundred and twenty grains ;
Clarified Honey a sufficient quantity.

Mix the Sulphate of Quinia and Gum Arabic ; then beat them with Clarified Honey so as to form a pilular mass, to be divided into four hundred and eighty pills.

PILULÆ RHEI.

Pills of Rhubarb.

Take of Rhubarb, in fine powder, three hundred and sixty grains ;
Soap, in fine powder, one hundred and twenty grains.

Beat them together with water so as to form a

pilular mass, to be divided into one hundred and twenty pills.

PILULÆ RHEI COMPOSITÆ.

Compound Pills of Rhubarb.

Take of Rhubarb, in fine powder, a troyounce ;
Socotrine Aloes, in fine powder, three
hundred and sixty grains ;
Myrrh, in fine powder, half a troyounce ;
Oil of Peppermint half a fluidrachm.

Beat them together with water so as to form a pilular mass, to be divided into two hundred and forty pills.

PILULÆ SAPONIS COMPOSITÆ.

Compound Pills of Soap.

Take of Opium, in fine powder, sixty grains ;
Soap, in fine powder, half a troyounce.

Beat them together with water so as to form a pilular mass.

PILULÆ SCILLÆ COMPOSITÆ.

Compound Pills of Squill.

Take of Squill, in fine powder, sixty grains ;
Ginger, in fine powder,
Ammoniac, in fine powder, each, one
hundred and twenty grains ;

Soap, in fine powder, one hundred and eighty grains ;

Syrup a sufficient quantity.

Mix the powders ; then beat them with Syrup so as to form a pilular mass, to be divided into one hundred and twenty pills.

PLUMBUM.

PLUMBI IODIDUM.

Iodide of Lead.

Take of Nitrate of Lead,

Iodide of Potassium, each, four troy-ounces ;

Distilled Water a sufficient quantity.

With the aid of heat, dissolve the Nitrate of Lead in a pint and a half, and the Iodide of Potassium in half a pint of Distilled Water, and mix the solutions. Allow the precipitate formed to subside, and, having poured off the supernatant liquid, wash it with Distilled Water and dry it with a gentle heat.

A bright-yellow, heavy, inodorous powder, fusible and volatilizable by heat, and soluble in twelve hundred and thirty-five parts of cold, and one hundred and ninety-four parts of boiling water. A hot, saturated solution, on cooling, deposits the salt in brilliant golden scales.

POTASSIUM.

POTASSA.*Potassa.*

Take of Solution of Potassa eight pints.

Evaporate it rapidly in an iron vessel, over the fire, until ebullition ceases and the Potassa melts. Pour this into suitable moulds, and keep it, when cold, in a well-stopped bottle.

Potassa is very deliquescent, and dissolves in water and alcohol, with the exception of a slight residue. Its aqueous solution has the properties mentioned under *Solution of Potassa*.

POTASSA CUM CALCE.*Potassa with Lime.*

Take of Potassa,

Lime, each, a troyounce.

Rub them together so as to form a powder, and keep it in a well-stopped bottle.

A grayish-white powder, which, when mixed with water, does not effervesce on the addition of an acid.

POTASSÆ ACETAS.*Acetate of Potassa.*

Take of Acetic Acid a pint ;

Bicarbonate of Potassa a sufficient quantity.

Add the Bicarbonate gradually to the Acid until this is saturated; then filter the solution, and evaporate cautiously, by means of a sand-bath, until a dry salt remains. Lastly, keep this in a well-stopped bottle.

A white deliquescent salt, wholly soluble in water and alcohol. The solution does not change the colour of litmus or turmeric, and yields no precipitate with chloride of barium or ferrocyanide of potassium. If dilute it is not precipitated by nitrate of silver; but if concentrated it gives with that salt a precipitate, which is redissolved by water or dilute nitric acid. Bichloride of platinum occasions a yellow precipitate, and sulphuric acid a copious disengagement of acetous vapours.

POTASSÆ BICARBONAS.

Bicarbonate of Potassa.

Take of Carbonate of Potassa forty-eight troy-ounces;

Distilled Water ten pints.

Dissolve the Carbonate in the Distilled Water, and pass carbonic acid through the solution until it is fully saturated. Then filter the liquid, and evaporate that crystals may form, taking care that the heat does not exceed 160° . Lastly, pour off the supernatant liquid, and dry the crystals on bibulous paper.

Carbonic acid may be obtained from Marble by the addition of dilute sulphuric acid.

In white crystals, permanent in the air and wholly soluble in water. It has a slightly alkaline taste, and feebly affects the colour of turmeric. When treated with nitric acid in excess, it yields little or no precipitate with nitrate of silver. Its aqueous solution, unless heated, does not yield a precipitate with sulphate of magnesia. The crystals lose thirty and seven-tenths per cent. by exposure to a red heat. Its other properties are the same as those mentioned under *Pure Carbonate of Potassa*.

POTASSÆ CARBONAS.

Carbonate of Potassa.

Take of Impure Carbonate of Potassa thirty-six troyounces;

Water two pints and a half.

Dissolve the Impure Carbonate in the Water, and filter the solution; then pour it into an iron vessel, and evaporate over a gentle fire until it thickens. Lastly, remove it from the fire, and stir constantly with an iron spatula until it forms a granular salt.

Carbonate of Potassa, treated with nitric acid in excess, exhibits a faint cloudiness on the addition of chloride of barium, and affords a slight precipitate with nitrate of silver. Its aqueous solution, when saturated with an acid, slowly deposits a slightly gelatinous precipitate. In other respects its properties correspond with those of *Pure Carbonate of Potassa*.

POTASSÆ CARBONAS PURA.

*Pure Carbonate of Potassa.*Potassæ Carbonas Purus, *Pharm.*, 1850.

Take of Bicarbonate of Potassa, in coarse powder, twelve troyounces.

Put it into a capacious iron crucible; heat gradually until the water of crystallization is driven off; then raise the heat to redness, and maintain that temperature for half an hour. Having taken the crucible from the fire, and allowed it to cool, dissolve its contents in Distilled Water, and filter the solution. Then pour it into an iron vessel, and evaporate over a gentle fire until it thickens. Lastly, remove it from the fire, and stir constantly with an iron spatula until it forms a granular salt.

A white, deliquescent salt, wholly soluble in water. It effervesces with acids, and changes the colour of turmeric to brown. Its solution yields with bichloride of platinum a yellow precipitate, and with sulphate of magnesia a precipitate which effervesces with acids. When saturated with an acid, it deposits nothing upon standing; and, when treated with pure nitric acid in excess, it is not precipitated by carbonate of soda, chloride of barium, or nitrate of silver. One hundred grains of the salt lose sixteen grains by exposure to a red heat.

POTASSÆ CITRAS.

Citrate of Potassa.

Take of Citric Acid ten troyounces ;

Bicarbonate of Potassa fourteen troy-
ounces ;

Water a sufficient quantity.

Dissolve the Citric Acid in two pints of Water, add the Bicarbonate gradually, and, when effervescence has ceased, strain the solution and evaporate to dryness, stirring constantly, after a pellicle has begun to form, until the salt granulates. Then rub it in a mortar, pass it through a coarse sieve, and keep it in a well-stopped bottle.

A white, granular, deliquescent salt, wholly and readily soluble in water. Its solution does not affect the colour of litmus, and yields no precipitate with muriatic acid. When heated to redness it affords a residue of pure carbonate of potassa.

POTASSÆ ET SODÆ TARTRAS.*Tartrate of Potassa and Soda.*

Sodæ et Potassæ Tartras, *Pharm.*, 1850.

Rochelle Salt.

Take of Carbonate of Soda twelve troyounces ;

Bitartrate of Potassa, in fine powder,
sixteen troyounces ;

Boiling Water five pints.

Dissolve the Carbonate of Soda in the Water, and gradually add the Bitartrate of Potassa. Filter the solution, and evaporate until a pellicle begins to form; then set it aside to crystallize. Pour off the mother-water, and dry the crystals on bibulous paper. Lastly, evaporate the mother-water that it may furnish more crystals.

In colourless, transparent crystals, which effloresce slightly in dry air, and are wholly and readily soluble in five parts of boiling water. The solution does not affect the colour of litmus, and yields no precipitate with chloride of barium or a dilute solution of nitrate of silver. From a strong solution the mineral acids throw down a crystalline precipitate of bitartrate of potassa.

POTASSÆ TARTRAS.

Tartrate of Potassa.

Take of Carbonate of Potassa sixteen troy-ounces ;

Bitartrate of Potassa, in fine powder,
thirty-six troyounces, or a sufficient
quantity ;

Boiling Water eight pints.

Dissolve the Carbonate of Potassa in the Water ; then gradually add Bitartrate of Potassa to the solution until it is completely saturated, and boil. Filter the liquid, evaporate until a pellicle forms, and set it aside to crystallize. Lastly, pour off the

mother-water, and, having dried the crystals on bibulous paper, keep them in a well-stopped bottle.

In white crystals, which are somewhat deliquescent, and are wholly and readily soluble in four parts of boiling water. The solution yields a crystalline precipitate of bitartrate of potassa upon the addition of most of the acids. Acetate of lead occasions a white precipitate, wholly soluble in dilute nitric acid.

POTASSII BROMIDUM.

Bromide of Potassium.

Take of Bromine two troyounces ;

Iron, in the form of filings, a troyounce ;

Pure Carbonate of Potassa two troy-
ounces and sixty grains ;

Distilled Water four pints.

Add the Iron, and afterwards the Bromine, to a pint and a half of the Distilled Water, stirring the mixture frequently with a glass rod for half an hour. Apply a gentle heat, and, when the liquid assumes a greenish colour, add gradually the Pure Carbonate of Potassa, previously dissolved in a pint and a half of the Distilled Water, until it ceases to produce a precipitate. Continue the heat for half an hour, and then filter. Wash the precipitate with the remainder of the Distilled Water boiling hot, and again filter. Mix the filtered liquids, and evaporate that crystals may

form. Lastly, pour off the mother-water, and, having dried the crystals on bibulous paper, keep them in a well-stopped bottle.

In white crystals, wholly soluble in water, but sparingly soluble in alcohol. Its aqueous solution does not affect the colour of litmus or turmeric, and is not precipitated by chloride of barium. When mixed with starch and treated with sulphuric acid, it becomes yellow. The salt, when subjected to heat, does not lose weight. Ten grains of it require, for complete precipitation, fourteen and three-tenths grains of nitrate of silver; and the precipitate formed has a yellowish colour.

POTASSII CYANIDUM.

Cyanide of Potassium.

Potassii Cyanuretum, *Pharm.*, 1850.

Take of Ferrocyanide of Potassium, dried, eight troyounces;

Pure Carbonate of Potassa, dried, three troyounces.

Mix the salts intimately, and throw the mixture into a deep iron crucible, previously heated to redness. Maintain the temperature until effervescence ceases, and the fused mass concretes, of a pure white colour, upon a warm glass rod dipped into it. Then pour out the liquid carefully into a shallow dish to solidify, ceasing to pour before the salt becomes contaminated with the precipitated iron.

Break up the mass while yet warm, and keep the pieces in a well-stopped bottle.

Cyanide of Potassium, thus prepared, is in white, opaque, amorphous pieces, having a sharp, somewhat alkaline and bitter-almond taste, and an alkaline reaction. It is deliquescent in moist air, readily soluble in water when reduced to powder, and sparingly soluble in alcohol. Its solution exhales the odour of hydrocyanic acid when exposed to the air, effervesces on the addition of an acid, and, when added to a solution of nitrate of silver, yields a precipitate wholly soluble in ammonia.

POTASSII IODIDUM.

Iodide of Potassium.

Take of Potassa six troyounces ;

Iodine, in fine powder, sixteen troy-ounces, or a sufficient quantity.

Charcoal, in fine powder, two troy-ounces ;

Distilled Water a sufficient quantity.

To the Potassa, dissolved in three pints of Distilled Water boiling hot, gradually add the Iodine, stirring after each addition until the solution becomes colourless, and continue the additions until the liquid remains slightly coloured from excess of Iodine. Evaporate the solution to dryness, stirring in the Charcoal towards the close of the operation, so that it may be intimately mixed with the dried salt. Rub this to powder, and heat it to

dull redness in an iron crucible, maintaining that temperature for fifteen minutes; then, after it has cooled, dissolve out the saline matter with Distilled Water, filter the solution, evaporate, and set it aside to crystallize. An additional quantity of crystals may be obtained from the mother-water by evaporating and crystallizing as before.

Iodide of Potassium is in white or transparent crystals, wholly soluble in water and alcohol. It produces no change in the colour of litmus, and little if any in that of turmeric. Its solution, mixed with dilute sulphuric acid, and afterwards with solution of starch, gradually assumes a purple tint, which at length becomes blue. When tartaric acid is freely added to a strong solution, it occasions a white crystalline precipitate; and the supernatant liquid, if mixed with solution of starch, becomes first purple and finally blue. Bichloride of platinum colours its solution reddish-brown without causing a precipitate, chloride of barium affects it but slightly, and sulphate of iron occasions no change. Ten grains of Iodide of Potassium yield, with an excess of nitrate of silver, a yellow precipitate, which, when washed and dried, weighs fourteen and one-tenth grains. If this precipitate be treated with ammonia, and nitric acid be added to the clear liquid, no precipitate will be produced. Exposed to a dull-red heat, Iodide of Potassium melts, and on cooling concretes into a crystalline pearly mass, without loss of weight; but, at a full-red heat, it is slowly volatilized without decomposition.

POTASSII SULPHURETUM.

Sulphuret of Potassium.

Take of Sublimed Sulphur a troyounce ;

Carbonate of Potassa two troyounces.

With the Sulphur rub the Carbonate, previously dried, and heat the mixture gradually in a covered crucible until it ceases to swell and is completely melted. Then pour out the liquid on a marble slab, and, when the mass is cold, break it into pieces, and keep these in a well-stopped bottle of green glass.

Sulphuret of Potassium is of a brownish-yellow colour when freshly broken. It dissolves in water, with the exception of a slight residue, and forms an orange-yellow solution, which exhales the odour of hydrosulphuric acid. When the solution is boiled with an excess of muriatic acid and filtered, it gives a yellow precipitate with bichloride of platinum ; and, when the same acid is added to it, hydrosulphuric acid is evolved, and sulphur deposited.

P U L V E R E S.

PULVERES EFFERVESCENTES.*Effervescing Powders.**Soda Powders.*

Take of Bicarbonate of Soda, in fine powder,
three hundred and sixty grains ;
Tartaric Acid, in fine powder, three
hundred grains.

Divide each of the powders into twelve equal parts, and keep the parts, severally, of the Bicarbonate and of the Acid in separate papers of different colours.

PULVERES EFFERVESCENTES APERIENTES.

Aperient Effervescing Powders.

Seidlitz Powders.

Take of Bicarbonate of Soda, in fine powder,
a troyounce ;

Tartrate of Potassa and Soda, in fine
powder, three troyounces ;

Tartaric Acid, in fine powder, four
hundred and twenty grains.

Mix intimately the Bicarbonate of Soda with the Tartrate of Potassa and Soda, and divide this mixture into twelve equal parts. Then divide the Tartaric Acid into the same number of equal parts. Lastly, keep the parts, severally, of the mixture and of the Acid in separate papers of different colours.

PULVIS ALOËS ET CANELLÆ.

Powder of Aloes and Canella.

Take of Socotrine Aloes, in fine powder, twelve
troyounces ;

Canella, in fine powder, three troy-ounces.

Rub them together until they are thoroughly mixed.

PULVIS AROMATICUS.

Aromatic Powder.

Take of Cinnamon, in fine powder,
Ginger, in fine powder, each, two troy-ounces ;
Cardamom, deprived of the capsules
and in fine powder,
Nutmeg, in fine powder, each, a troy-ounce.

Rub them together until they are thoroughly mixed.

PULVIS IPECACUANHÆ COMPOSITUS.

Compound Powder of Ipecacuanha.

Pulvis Ipecacuanhæ et Opii, *Pharm.*, 1850.

Dover's Powder.

Take of Ipecacuanha, in fine powder,
Opium, dried and in fine powder, each,
sixty grains ;
Sulphate of Potassa a troyounce.
Rub them together into a very fine powder.

PULVIS JALAPÆ COMPOSITUS.

Compound Powder of Jalap.

Take of Jalap, in fine powder, a troyounce;
Bitartrate of Potassa, in fine powder,
two troyounces.

Rub them together until they are thoroughly mixed.

PULVIS RHEI COMPOSITUS.

Compound Powder of Rhubarb.

Take of Rhubarb, in fine powder, four troy-
ounces;
Magnesia twelve troyounces;
Ginger, in fine powder, two troyounces.

Rub them together until they are thoroughly mixed.

QUINIA.

QUINIÆ SULPHAS.

Sulphate of Quinia.

Take of Yellow Cinchona, in coarse powder,
forty-eight troyounces;
Muriatic Acid three troyounces and
a half;

Lime, in fine powder, five troyounces ;
Animal Charcoal, in fine powder,
Sulphuric Acid,
Alcohol,
Water,
Distilled Water, each, a sufficient
quantity.

Boil the Cinchona in thirteen pints of Water, mixed with one-third of the Muriatic Acid, and strain through muslin. Boil the residue twice successively with the same quantity of Water and Acid as before, and strain. Mix the decoctions, and, while the liquid is hot, gradually add the Lime, previously mixed with two pints of Water, stirring constantly, until the quinia is completely precipitated. Wash the precipitate with Distilled Water, and, having pressed, dried, and powdered it, digest it in boiling Alcohol. Pour off the liquid, and repeat the digestion several times until the Alcohol is no longer rendered bitter. Mix the liquids, and distil off the alcohol until a brown viscid mass remains. Upon this, transferred to a suitable vessel, pour four pints of Distilled Water, and, having heated the mixture to the boiling point, add as much Sulphuric Acid as may be necessary to dissolve the quinia. Then add a troy-

ounce and a half of Animal Charcoal, boil the liquid for two minutes, filter while hot, and set it aside to crystallize. Should the liquid, before filtration, be entirely neutral, acidulate it very slightly with Sulphuric Acid; should it, on the contrary, change the colour of litmus paper to a bright red, add more Animal Charcoal. Separate the crystals from the liquid, dissolve them in boiling Distilled Water slightly acidulated with Sulphuric Acid, add a little Animal Charcoal, filter the solution, and set it aside to crystallize. Lastly, dry the crystals on bibulous paper with a gentle heat, and keep them in a well-stopped bottle.

The mother-water may be made to yield an additional quantity of Sulphate of Quinia by precipitating the quinia with Water of Ammonia, and treating the precipitated alkaloid with Distilled Water, Sulphuric Acid, and Animal Charcoal, as before.

A colourless salt, in silky, very light crystals, which are entirely dissolved by about seven hundred and forty parts of cold, and thirty of boiling water, are readily soluble in alcohol, and in water acidulated with sulphuric acid, and are insoluble in ether. The aqueous solution, upon the addition of chlorine and afterwards of ammonia, assumes a green colour. By a moderate heat, the crystals lose from eight to ten per cent. of water of crystallization, and at a red heat are wholly dissipated. When ten grains of the salt are agitated in a test-tube with ten minims of officinal water of ammonia and sixty

grains of ether, and allowed to rest, the resulting liquid separates into two transparent and colourless layers, without any white or crystalline matter at the surface of contact.

QUININÆ VALERIANAS.

Valerianate of Quinia.

Take of Valerianic Acid half a troyounce;
Sulphate of Quinia two troyounces;
Diluted Sulphuric Acid,
Water of Ammonia,
Water, each, a sufficient quantity.

Dissolve the Sulphate of Quinia in a pint of Water, with the aid of Diluted Sulphuric Acid; then add Water of Ammonia in slight excess, and wash the precipitated quinia with water until freed from sulphate of ammonia. Dissolve the Valerianic Acid in five pints of Water, heated to 180° , add the quinia to the solution, and, when it is dissolved, set the whole aside for several days to crystallize. Decant the mother-water from the crystals, dry them on bibulous paper, and keep them in a well-stopped bottle.

By evaporating the mother-water at a temperature not exceeding 120° , more crystals may be obtained.

A colourless salt, crystallizing in rhomboidal tables, and having a peculiar, repulsive odour, and bitter taste. When heated it fuses,

and gives off white vapours. It is soluble in one hundred and ten parts of cold and forty parts of boiling water, and in six parts of cold and one part of boiling alcohol. It is also soluble in ether.

RESINÆ.

RESINA JALAPÆ.

Resin of Jalap.

Take of Jalap, in fine powder, sixteen troy-ounces;

Alcohol,

Water, each, a sufficient quantity.

Moisten the Jalap with four fluidounces of Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Alcohol upon it until four pints have passed, or until the filtered liquid ceases to occasion turbidness when dropped into water. Reduce the tincture to half a pint by distilling off the alcohol, mix the residue with four pints of Water, separate the precipitate formed, wash it thoroughly with Water, and dry it with a gentle heat.

Resin of Jalap is partly soluble in ether, and the residue, when dissolved in officinal solution of potassa, is not precipitated by the addition of dilute muriatic acid in excess.

RESINA PODOPHYLLI.

Resin of May-apple.

Take of May-apple, in fine powder, sixteen troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Moisten the May-apple with four fluidounces of Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Alcohol upon it until four pints have passed, or until the filtered liquid ceases to occasion turbidness when dropped into water. Reduce the tincture to half a pint by distilling off the alcohol, mix the residue with four pints of Water, separate the precipitate formed, wash it thoroughly with Water, and dry it with a gentle heat.

Resin of May-apple is partly soluble in ether, and the residue, when dissolved in officinal solution of potassa, is precipitated by the addition of dilute muriatic acid in excess.

RESINA SCAMMONII.*Resin of Scammony.*

Take of Scammony, in fine powder, six troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Digest the Scammony with successive portions of boiling Alcohol until exhausted. Mix the tinctures, and reduce the mixture to a syrupy consistence by distilling off the alcohol. Then add the residue to a pint of Water, separate the precipitate formed, wash it thoroughly with Water, and dry it with a gentle heat.

Resin of Scammony is wholly soluble in ether. It dissolves in officinal solution of potassa, and the heated solution is not precipitated by the addition of dilute muriatic acid in excess.

SANTONINUM.

SANTONINUM.

Santonin.

Take of Santonica, in moderately coarse powder, forty-eight troyounces ;

Lime, recently slaked and in fine powder, eighteen troyounces ;

Animal Charcoal, in fine powder,

Diluted Alcohol,

Acetic Acid,

Alcohol, each, a sufficient quantity.

Digest the Santonica and Lime with twelve pints of Diluted Alcohol for twenty-four hours,

and express. Repeat the digestion and expression twice with the residue, using the same quantity of Diluted Alcohol. Mix the tinctures, and reduce the mixture to eight pints by distilling off the alcohol. Then, having filtered, and evaporated to one-half, gradually add Acetic Acid until in slight excess, stirring during the addition, and set the whole aside for forty-eight hours. Place the resulting crystalline mass upon a funnel loosely stopped, wash it with water, and dry it. Next, boil the dry residue with ten times its weight of Alcohol; and, having digested the tincture for several hours with Animal Charcoal, filter it while hot, and add sufficient hot Alcohol, through the filter, to wash the Charcoal thoroughly; then set it aside in a dark place to crystallize. Lastly, dry the crystals on bibulous paper in the dark, and keep them in a well-stopped bottle, protected from the light.

By evaporating the mother-water, more crystals may be obtained.

A colourless substance, crystallizing in shining, flattened prisms, without smell, and nearly tasteless when first put into the mouth, but afterwards bitter. It is not altered by the air, but becomes yellow on exposure to light. It melts when heated, and forms, on cooling, a crystalline mass. When heated somewhat above its melting point, it rises unchanged in dense, white, irritating vapours.

Nearly insoluble in cold water, it is dissolved by two hundred and fifty parts of boiling water. It is soluble in forty-three parts of cold and three parts of boiling alcohol, and in seventy-five parts of ether. Its alcoholic and ethereal solutions are intensely bitter.

S O D I U M.

SODÆ BICARBONAS.

Bicarbonate of Soda.

Take of Carbonate of Soda a convenient quantity.

Put the Carbonate, previously broken in pieces, into a wooden box, having a horizontal partition near the bottom, pierced with numerous small holes, and a cover which can be tightly fitted on. To a bottle, having two tubulures, and half-filled with water, adapt two tubes; the first passing from an apparatus for generating carbonic acid, through one tubulure, to a point below the surface of the water in the bottle; the second reaching from the other tubulure to an opening near the bottom of the box, beneath the partition. Then lute all the joints, and cause a stream of carbonic acid to pass through the water into the box until the Carbonate is fully saturated. Lastly,

remove the product from the box, and, having dried it, rub it into powder.

Carbonic acid may be obtained from Marble by the addition of dilute sulphuric acid.

A white, opaque powder, wholly soluble in water. By a strong heat it is converted into anhydrous carbonate of soda. It slightly affects the colour of turmeric, and is decomposed with effervescence by acids. It does not yield a precipitate with bichloride of platinum, nor, unless heated, with sulphate of magnesia. The precipitate produced by chloride of barium is wholly soluble in nitric acid.

SODÆ CARBONAS EXSICCATA.

Dried Carbonate of Soda.

Sodæ Carbonas Exsiccatus, *Pharm.*, 1850.

Take of Carbonate of Soda a convenient quantity.

Expose it to heat, in an iron vessel, until it is thoroughly dried, stirring constantly with an iron spatula; then rub it into powder.

SODÆ PHOSPHAS.

Phosphate of Soda.

Take of Bone, calcined to whiteness and in fine powder, one hundred and twenty troyounces;

Sulphuric Acid seventy-two troyounces;

Carbonate of Soda,

Water, each, a sufficient quantity.

Mix the powder with the Sulphuric Acid in an earthen vessel; then add eight pints of Water, and, having stirred the mixture thoroughly, digest for three days, occasionally adding a little Water to replace that which is lost by evaporation, and frequently stirring the mixture. At the expiration of that time, pour in eight pints of boiling Water, and strain through muslin, gradually adding more boiling Water until the liquid passes nearly tasteless. Set by the strained liquid that the dregs may subside, and, having poured off the clear solution, boil it down to eight pints. To the concentrated liquid, poured off from the newly formed dregs, and heated in an iron vessel, add by degrees Carbonate of Soda, previously dissolved in hot Water, until effervescence ceases, and the phosphoric acid is completely saturated; then filter the liquid and set it aside to crystallize. Having removed the crystals, add, if necessary, a small quantity of Carbonate of Soda to the liquid, so as to render it slightly alkaline; then alternately evaporate and crystallize so long as crystals are produced. Lastly, keep the crystals in a well-stopped bottle.

In colourless, transparent crystals, which speedily effloresce and become opaque when exposed to the air. It is wholly soluble in water, but insoluble in alcohol. The solution has an alkaline reaction, and does not effervesce with acids. It yields with nitrate of silver a yellow precipitate, and with chloride of barium a white one, both soluble in nitric acid.

SODÆ VALERIANAS.

Valerianate of Soda.

Take of Bichromate of Potassa, in fine powder,
ten troyounces ;

Sulphuric Acid fourteen troyounces ;

Amylic Alcohol four fluidounces ;

Water four pints ;

Solution of Soda a sufficient quantity.

Dissolve the Bichromate, with the aid of heat, in three pints of the Water, and add to the solution seven troyounces of the Sulphuric Acid, previously diluted with the remainder of the Water. Pour the liquid into a tubulated retort, to which a receiver is attached without luting. Mix the Amylic Alcohol with the remainder of the Sulphuric Acid, gradually added, and, by means of a funnel-shaped tube, passing through a cork in the tubulure of the retort and dipping into the liquid, introduce the mixture, when cool, into the retort, in small portions at a time, until it is all added.

Return to the retort any liquid which may have spontaneously distilled over, and agitate the whole until the reaction has subsided, and the temperature has fallen to about 100° . Then, by means of a sand-bath, distil the liquid nearly to dryness. Introduce the distilled liquid into a capacious glass matrass, and add to it Solution of Soda, with frequent agitation, until it is accurately saturated. Separate the oil that floats on the liquid, and evaporate the latter until aqueous vapour ceases to escape, and nothing remains but the salt in a state of fusion. Lastly, pour the fused salt on a porcelain slab, and, after it has concreted, break the mass while yet warm in pieces, and keep these in a well-stopped bottle.

A deliquescent, very soluble salt, in soft, white, crystalline pieces, having a faint odour of valerianic acid, and a taste at first styptic, but afterwards sweetish. It melts without loss of acid at 285° , and concretes on cooling. If one hundred grains of it, dissolved in six hundred grains of water heated to 200° , be mixed with a solution of one hundred grains of sulphate of zinc in the same quantity of water, crystals of valerianate of zinc will be formed on the surface of the mixture before it cools.

SPIRITUS.

SPIRITUS ÆTHERIS COMPOSITUS.

*Compound Spirit of Ether.**Hoffmann's Anodyne.*

Take of Ether half a pint;

Alcohol a pint;

Ethereal Oil six fluidrachms.

Mix them.

A colourless, volatile, inflammable liquid, having an aromatic, ethereal odour, and a burning, slightly sweetish taste. Its specific gravity is 0.815. It is neutral or but slightly acid to litmus. It gives only a slight cloudiness with chloride of barium; but, when a fluidounce of it is evaporated to dryness with an excess of this test, it yields a precipitate of sulphate of baryta, which, when washed and dried, weighs six and a quarter grains. When a few drops are burned on glass or porcelain, there is no visible residue, but the surface will be left with an acid taste and reaction. A pint of water, by the admixture of forty drops, is rendered slightly opalescent.

SPIRITUS ÆTHERIS NITROSI.

Spirit of Nitrous Ether.

Spiritus Ætheris Nitrici, *Pharm.*, 1850.

Sweet Spirit of Nitre.

Take of Nitric Acid nineteen troyounces and a half;

Stronger Alcohol nine pints;

Carbonate of Potassa a troyounce.

Introduce four pints of the Alcohol into a retort, having the capacity of eight pints, and containing some pieces of glass, and add the Nitric Acid. Adapt the retort to a Liebig's condenser, and apply heat by means of a water-bath so arranged that the water may be drawn off during the process. When the mixture boils briskly, draw off almost all the water of the bath, and allow the distillation to proceed spontaneously until it begins to slacken. Then cautiously reapply heat by means of the water-bath, and continue the distillation until four pints of the distilled liquid have passed over. Having thrown away the residue, rinse the apparatus thoroughly, return the liquid to the retort, add the Carbonate of Potassa to it, agitate the mixture, and again distil by means of a water-bath, slowly at first, until three pints and a half of distilled liquid have been obtained. With this mix thoroughly the remainder of the Alcohol, and transfer the mixture to half-pint bottles, which must be well stopped, and protected from the light.

Spirit of Nitrous Ether is a volatile, inflammable liquid, of a pale-yellow colour inclining slightly to green, having a fragrant, ethereal odour, free from pungency, and a sharp, burning taste. It slightly reddens litmus, but does not cause effervescence when a crystal of bicarbonate of potassa is dropped into it. When mixed with half its

volume of officinal solution of potassa, previously diluted with an equal measure of distilled water, it assumes a yellow colour, which slightly deepens, without becoming brown, in twelve hours. A portion of the Spirit in a test-tube half-filled with it, plunged into water heated to 145° , and held there until it has acquired that temperature, will boil distinctly on the addition of a few small pieces of glass.

Spirit of Nitrous Ether has the specific gravity 0.837, and contains from four and three-tenths to five per cent. of its peculiar ether. It should not be long kept, as it becomes strongly acid by age.

SPIRITUS AMMONIÆ.

Spirit of Ammonia.

Take of Muriate of Ammonia, in small pieces,
Lime, each, twelve troyounces;
Water six pints;
Alcohol twenty fluidounces.

Upon the Lime, in a convenient vessel, pour a pint of the Water, and stir the mixture so as to bring it to the consistence of a smooth paste. Then add the remainder of the Water, and mix it well with the Lime. Decant the milky liquid from the gritty sediment into a glass retort, of the capacity of sixteen pints, and add the Muriate of Ammonia. Place the retort on a sand-bath, and adapt to it a receiver, previously connected with a two-pint bottle containing the Alcohol, by means of a glass tube reaching nearly to the bot-

tom of the bottle. Surround the bottle with ice-cold water; and apply a gradually increasing heat until ammonia ceases to be given off. Lastly, remove the liquid from the bottle, and introduce it into small bottles, which must be well stopped.

SPIRITUS AMMONIÆ AROMATICUS.

Aromatic Spirit of Ammonia.

Take of Carbonate of Ammonia a troyounce;
Water of Ammonia three fluidounces;
Oil of Lemon two fluidrachms and a
half;
Oil of Nutmeg forty minims;
Oil of Lavender fifteen minims;
Alcohol a pint and a half;
Water a sufficient quantity.

Dissolve the Carbonate in the Water of Ammonia, previously mixed with four fluidounces of Water. Dissolve the Oils in the Alcohol, mix the two solutions, and add sufficient Water to make the whole measure two pints.

SPIRITUS ANISI.

Spirit of Anise.

Take of Oil of Anise a fluidounce ;
Stronger Alcohol fifteen fluidounces.
Dissolve the Oil in the Stronger Alcohol.

SPIRITUS CAMPHORÆ.

*Spirit of Camphor.*Tinctura Camphoræ, *Pharm.*, 1850.

Take of Camphor four troyounces ;
Alcohol two pints.
Dissolve the Camphor in the Alcohol, and filter
through paper.

SPIRITUS CHLOROFORMI.

Spirit of Chloroform.

Take of Purified Chloroform a troyounce ;
Stronger Alcohol six fluidounces.
Dissolve the Chloroform in the Stronger Alcohol.

SPIRITUS CINNAMOMI.

Spirit of Cinnamon.

Take of Oil of Cinnamon a fluidounce ;
Stronger Alcohol fifteen fluidounces.
Dissolve the Oil in the Stronger Alcohol.

SPIRITUS JUNIPERI COMPOSITUS.

Compound Spirit of Juniper.

Take of Oil of Juniper a fluidrachm and a half;
Oil of Caraway,
Oil of Fennel, each, ten minims;
Diluted Alcohol eight pints.

Dissolve the Oils in the Diluted Alcohol.

SPIRITUS LAVANDULÆ.

Spirit of Lavender.

Take of Lavender, fresh, twenty-four troyounces;
Alcohol eight pints;
Water two pints.

Mix them, and with a regulated heat distil eight pints.

SPIRITUS LAVANDULÆ COMPOSITUS.

Compound Spirit of Lavender.

Take of Oil of Lavender a fluidounce;
Oil of Rosemary two fluidrachms;
Cinnamon, in moderately fine powder,
two troyounces;
Cloves, in moderately fine powder, half
a troyounce;
Nutmeg, in moderately fine powder, a
troyounce;

Red Saunders, in moderately fine powder, three hundred and sixty grains ;
Alcohol six pints ;
Water two pints ;
Diluted Alcohol a sufficient quantity.

Dissolve the Oils in the Alcohol, and add the Water. Then mix the powders, and, having moistened the mixture with a fluidounce of the alcoholic solution of the Oils, pack it firmly in a conical percolator, and gradually pour upon it the remainder of the alcoholic solution, and afterwards Diluted Alcohol, until the filtered liquid measures eight pints.

SPIRITUS LIMONIS.

*Spirit of Lemon.**Essence of Lemon.*

Take of Oil of Lemon two fluidounces ;
Lemon Peel, freshly grated, a troy-ounce ;
Stronger Alcohol two pints.

Dissolve the Oil in the Stronger Alcohol, add the Lemon Peel, macerate for twenty-four hours, and filter through paper.

SPIRITUS MENTHÆ PIPERITÆ.

Spirit of Peppermint.

Tinctura Olei Menthæ Piperitæ, *Pharm.*, 1850.

Essence of Peppermint.

Take of Oil of Peppermint a fluidounce ;
Peppermint, in coarse powder, one
hundred and twenty grains ;
Stronger Alcohol fifteen fluidounces.

Dissolve the Oil in the Stronger Alcohol, add
the Peppermint, macerate for twenty-four hours,
and filter through paper.

SPIRITUS MENTHÆ VIRIDIS.

Spirit of Spearmint.

Tinctura Olei Menthæ Viridis, *Pharm.*, 1850.

Essence of Spearmint.

Take of Oil of Spearmint a fluidounce ;
Spearmint, in coarse powder, one hun-
dred and twenty grains ;
Stronger Alcohol fifteen fluidounces.

Dissolve the Oil in the Stronger Alcohol, add
the Spearmint, macerate for twenty-four hours,
and filter through paper.

SPIRITUS MYRISTICÆ.

Spirit of Nutmeg.

Take of Nutmeg, bruised, two troyounces;
Diluted Alcohol eight pints;
Water a pint.

Mix them, and with a regulated heat distil eight pints.

STRYCHNIA.

STRYCHNIA.

Strychnia.

Take of Nux Vomica, rasped, forty-eight troy-ounces;
Lime, in fine powder, six troyounces;
Muriatic Acid three troyounces and a half;
Alcohol,
Diluted Alcohol,
Diluted Sulphuric Acid,
Water of Ammonia,
Purified Animal Charcoal,
Water, each, a sufficient quantity.

Macerate the Nux Vomica, for twenty-four hours, in sixteen pints of Water, acidulated with one-third

of the Muriatic Acid; then boil for two hours, and strain with expression through a strong muslin bag. Boil the residue twice successively in the same quantity of acidulated Water, each time straining as before. Mix the decoctions, and evaporate to the consistence of thin syrup; then add the Lime previously mixed with a pint of Water, and boil for ten minutes, frequently stirring. Pour the whole into a double muslin bag, and, having thoroughly washed the precipitate, press, dry, and powder it. Treat the powder repeatedly with Diluted Alcohol, in order to remove the brucia, until the washings are but faintly reddened by nitric acid. Then boil it repeatedly with Alcohol until deprived of bitterness, mix the several tinctures, and distil off the alcohol by means of a water-bath. Having washed the residue, mix it with a pint of Water, and, applying a gentle heat, drop in sufficient Diluted Sulphuric Acid to neutralize and dissolve the alkaloid. Then add Purified Animal Charcoal, and, having boiled the mixture for a few minutes, filter, evaporate, and set aside to crystallize. Dissolve the crystals in Water, and add sufficient Water of Ammonia to precipitate the Strychnia. Lastly, dry this on bibulous paper, and keep it in a well-stopped bottle.

Strychnia, thus prepared, is a white or grayish-white powder, of an intensely bitter taste, nearly insoluble in water, slightly soluble in cold alcohol, and readily soluble in boiling alcohol. When heated it melts, and by a strong heat is wholly dissipated. It is but slightly or not at all reddened by nitric acid. A small portion of it, dissolved in officinal sulphuric acid, yields, on the addition of a minute quantity of bichromate of potassa, a splendid violet colour.

STRYCHNIAE SULPHAS.

Sulphate of Strychnia.

Take of Strychnia a troyounce ;

Diluted Sulphuric Acid nine fluidrachms, or a sufficient quantity ;

Distilled Water a pint.

Mix the Strychnia with the Distilled Water, heat the mixture gently, and gradually add Diluted Sulphuric Acid until the alkaloid is neutralized and dissolved. Filter the solution, and evaporate with a moderate heat, so that crystals may form on cooling. Lastly, having drained the crystals, dry them rapidly on bibulous paper, and keep them in a well-stopped bottle.

A white salt, in colourless, prismatic crystals, which are without odour, exceedingly bitter, readily soluble in water, sparingly soluble in alcohol, and insoluble in ether. They effloresce on exposure to the air, and melt when heated, losing nearly fourteen per cent. of their weight of water of crystallization. By a strong heat they are wholly volatilized. In other respects they answer to the tests for Strychnia.

S U L P H U R.

SULPHUR PRÆCIPITATUM.

Precipitated Sulphur.

Take of Sublimed Sulphur twelve troyounces ;
Lime eighteen troyounces ;
Muriatic Acid,
Water, each, a sufficient quantity.

Pour sufficient Water on the Lime to slake it, and, having mixed the Sulphur with it, add fifteen pints of Water to the mixture ; then boil for two hours, occasionally adding Water to preserve the same measure, and filter. Dilute the filtered liquid with an equal bulk of Water, and drop into it Muriatic Acid so long as a precipitate is produced. Lastly, wash the Precipitated Sulphur repeatedly with Water until the washings are nearly tasteless, and dry it.

Precipitated Sulphur is entirely dissipated by heat.

SULPHURIS IODIDUM.

Iodide of Sulphur.

Take of Iodine four troyounces ;
Sublimed Sulphur a troyounce.
Rub them together until they are thoroughly

mixed. Introduce the mixture into a flask, close the orifice loosely, and apply a gentle heat so as to darken the mass without melting it. When the colour has become uniformly dark throughout, increase the heat so as to produce liquefaction. Then incline the flask in different directions, in order to return into the liquid any portions of Iodine which may have been condensed on the inner surface of the vessel. Lastly, withdraw the heat, and, when the liquid has congealed, remove the mass by breaking the flask, reduce it to pieces, and keep these in a well-stopped bottle.

SYRUPI.

SYRUPUS.

Syrup.

Take of Sugar, in coarse powder, thirty-six troyounces.

Distilled Water a sufficient quantity.

Dissolve the Sugar, with the aid of heat, in twenty fluidounces of Distilled Water, raise the temperature to the boiling point, and strain the solution while hot. Then add sufficient Distilled Water, through the strainer, to make the Syrup

measure two pints and twelve fluidounces, or weigh fifty-five troyounces. Lastly, incorporate the Water, added through the strainer, with the solution. Syrup, thus prepared, has the specific gravity 1.317.

SYRUPUS ACACIÆ.

Syrup of Gum Arabic.

Take of Gum Arabic, in pieces, two troyounces;
Sugar, in coarse powder, fourteen troy-
ounces;

Water eight fluidounces.

Dissolve in the Water, first the Gum Arabic without heat, then the Sugar with a gentle heat, and strain.

SYRUPUS ACIDI CITRICI.

Syrup of Citric Acid.

Take of Citric Acid, in fine powder, one hundred
and twenty grains;

Oil of Lemon four minims;

Syrup two pints.

Rub the Citric Acid and Oil of Lemon with a fluidounce of the Syrup; then add the mixture to the remainder of the Syrup, and dissolve with a gentle heat.

SYRUPUS ALLII.

Syrup of Garlic.

Take of Garlic, sliced and bruised, six troy-
ounces ;

Sugar, in coarse powder, twenty-four
troyounces ;

Diluted Acetic Acid a pint.

Macerate the Garlic with ten fluidounces of the Diluted Acetic Acid, in a glass vessel, for four days, and express the liquid. Then mix the residue with the remainder of the Acid, and again express until sufficient additional liquid has been obtained to make the whole, when filtered, measure a pint. Lastly, introduce the Sugar into a two-pint bottle, pour upon it the filtered liquid, and agitate until it is dissolved.

SYRUPUS AMYGDALÆ.

Syrup of Almond.

Take of Sweet Almond twelve troyounces ;

Bitter Almond four troyounces ;

Sugar, in coarse powder, seventy-two
troyounces ;

Water three pints.

Having blanched the Almonds, rub them in a mortar to a very fine paste, adding, during the

trituration, three fluidounces of the Water and twelve troyounces of the Sugar. Mix the paste thoroughly with the remainder of the Water, strain with strong expression, add to the strained liquid the remainder of the Sugar, and dissolve it with the aid of a gentle heat. Lastly, strain the solution through muslin, and, having allowed it to cool, keep it in well-stopped bottles in a cool place.

SYRUPUS AURANTII CORTICIS.

Syrup of Orange Peel.

Take of Sweet Orange Peel, recently dried and in moderately fine powder, two troy-ounces;

Carbonate of Magnesia half a troy-ounce;

Sugar, in coarse powder, twenty-eight troyounces;

Alcohol,

Water, each, a sufficient quantity.

Moisten the Orange Peel with half a fluidounce of Alcohol, introduce it into a conical percolator, and pour Alcohol upon it until six fluidounces of tincture have passed. Evaporate this, at a temperature not exceeding 120°, to two fluidounces,

add the Carbonate of Magnesia and a troyounce of the Sugar, and rub them together, gradually adding half a pint of Water during the trituration. Then filter, and, having added sufficient Water to make the liquid measure a pint, dissolve in it the remainder of the Sugar with the aid of a gentle heat, and strain.

SYRUPUS AURANTII FLORUM.

Syrup of Orange Flowers.

Take of Orange Flower Water five fluidounces ;
Sugar, in coarse powder, thirty-six
troyounces ;
Distilled Water fifteen fluidounces.

Dissolve the Sugar in the Distilled Water, with the aid of a gentle heat, and raise the temperature to the boiling point. When the solution is nearly cold, mix thoroughly with it the Orange Flower Water, and strain.

SYRUPUS FERRI IODIDI.

Syrup of Iodide of Iron.

Liquor Ferri Iodidi, *Pharm.*, 1850.

Take of Iodine two troyounces ;
Iron, in the form of wire and cut in
pieces, three hundred grains ;

Distilled Water three fluidounces ;

Syrup a sufficient quantity.

Mix the Iodine, Iron, and Distilled Water in a flask of thin glass, shake the mixture occasionally until the reaction ceases, and the solution has acquired a green colour and lost the smell of iodine. Then, having introduced a pint of Syrup into a graduated bottle, heat it by means of a water-bath to 212° , and, through a small funnel inserted in the mouth of the bottle, filter into it the solution already prepared. When this has passed, close the bottle, shake it thoroughly, and, when the liquid has cooled, add sufficient Syrup to make the whole measure twenty fluidounces. Lastly, again shake the bottle, and transfer its contents to two-ounce vials, which must be well stopped.

A transparent liquid, of a pale-green colour. It deposits no sediment by keeping, and does not tinge solution of starch blue. Mixed with sulphuric acid it becomes brown, and the mixture emits violet vapours when heated.

SYRUPUS IPECACUANHÆ.

Syrup of Ipecacuanha.

Take of Fluid Extract of Ipecacuanha two fluidounces ;

Syrup thirty fluidounces.

Mix them.

SYRUPUS KRAMERLÆ.

Syrup of Rhatany.

Take of Rhatany, in moderately fine powder,
twelve troyounces;

Sugar, in coarse powder, thirty troy-
ounces;

Water a sufficient quantity.

Mix the Rhatany with half a pint of Water, and, having allowed the mixture to stand for two hours, introduce it into a glass percolator, and gradually pour Water upon it until four pints of filtered liquid are obtained. Evaporate this, by means of a water-bath, to seventeen fluidounces, and, having added the Sugar, dissolve it with the aid of a gentle heat, and strain the solution while hot.

This Syrup may also be prepared in the following manner.

Take of Extract of Rhatany two troyounces;

Sugar, in coarse powder, thirty troy-
ounces;

Water a pint.

Dissolve the Extract in the Water, and filter; then, having added the Sugar, dissolve it with the aid of a gentle heat, and strain the solution while hot.

SYRUPUS LACTUCARII.

Syrup of Lactucarium.

Take of Lactucarium a troyounce ;

Syrup fourteen fluidounces ;

Diluted Alcohol a sufficient quantity.

Rub the Lactucarium with sufficient Diluted Alcohol, gradually added, to bring it to a syrupy consistence. Then introduce it into a conical percolator, and, having carefully covered the surface with a piece of muslin, gradually pour Diluted Alcohol upon it until half a pint of tincture has passed. Evaporate this, by means of a water-bath, at a temperature not exceeding 160° , to two fluidounces, mix it with the Syrup, previously heated, and strain while hot.

SYRUPUS LIMONIS.

Syrup of Lemon.

Take of Lemon Juice, recently expressed, and strained, a pint ;

Sugar, in coarse powder, forty-eight troyounces ;

Water a pint.

Mix the Lemon Juice and Water, and, having added the Sugar to the mixture, dissolve it with the aid of a gentle heat, and strain the solution while hot.

SYRUPUS PRUNI VIRGINIANÆ.

Syrup of Wild-cherry Bark.

Take of Wild-cherry Bark, in coarse powder,
five troyounces ;

Sugar, in coarse powder, twenty-eight
troyounces ;

Water a sufficient quantity.

Moisten the Bark thoroughly with Water, and allow it to stand for twenty-four hours in a close vessel ; then pack it firmly in a glass percolator, and gradually pour Water upon it until a pint of filtered liquid is obtained. To this, transferred to a bottle, add the Sugar, and agitate occasionally until it is dissolved.

SYRUPUS RHEI.

Syrup of Rhubarb.

Take of Fluid Extract of Rhubarb three fluid-
ounces ;

Syrup twenty-nine fluidounces.

Mix them thoroughly.

SYRUPUS RHEI AROMATICUS.

Aromatic Syrup of Rhubarb.

Take of Rhubarb, in moderately fine powder,
two troyounces and a half ;

Cloves, in moderately fine powder,
Cinnamon, in fine powder, each, half a
troyounce ;

Nutmeg, in moderately fine powder,
one hundred and twenty grains ;

Syrup six pints ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with two fluidounces of Diluted Alcohol, introduce it into a conical percolator, and pour Diluted Alcohol upon it until a pint of tincture has passed. Add this to the Syrup, previously heated, and mix them thoroughly.

SYRUPUS ROSÆ GALLICÆ.

Syrup of Red Rose.

Take of Red Rose, in moderately fine powder,
two troyounces ;

Sugar, in coarse powder, eighteen troy-
ounces ;

Diluted Alcohol,

Water, each, a sufficient quantity.

Moisten the Rose with Diluted Alcohol, pack it firmly in a conical glass percolator, and gradually pour Diluted Alcohol upon it until a fluidounce of tincture has passed. Set this aside, and continue

the percolation until five fluidounces more of tincture are obtained. Evaporate this with a gentle heat to a fluidounce and a half, and mix it with seven fluidounces of Water. Then, having added the Sugar, dissolve it with the aid of a gentle heat, and strain the solution while hot. Lastly, when the solution is cold, add the fluidounce of reserved tincture, and mix them thoroughly.

SYRUPUS RUBI.

Syrup of Blackberry Root.

Take of Blackberry Root, in moderately fine powder, eight troyounces ;
Syrup a pint and a half ;
Diluted Alcohol a sufficient quantity.

Introduce the powder, previously moistened with four fluidounces of Diluted Alcohol, into a glass percolator, and pour Diluted Alcohol upon it until a pint and a half of tincture have passed. Evaporate this, by means of a water-bath, at a temperature not exceeding 160°, to half a pint ; then mix it while hot with the Syrup previously heated, and strain.

SYRUPUS SARSAPARILLÆ COMPOSITUS.

Compound Syrup of Sarsaparilla.

Take of Sarsaparilla, in moderately coarse powder, twenty-four troyounces ;

Guaiacum Wood, in moderately coarse powder, three troyounces ;

Pale Rose, in moderately coarse powder,

Senna, in moderately coarse powder,

Liquorice Root, in moderately coarse powder, each, two troyounces ;

Oil of Sassafras,

Oil of Anise, each, five minims ;

Oil of Gaultheria three minims ;

Sugar, in coarse powder, ninety-six troyounces ;

Diluted Alcohol a sufficient quantity.

Mix the solid ingredients, except the Sugar, with three pints of Diluted Alcohol, and allow the mixture to stand for twenty-four hours ; then transfer it to a cylindrical percolator, and gradually pour Diluted Alcohol upon it until ten pints of tincture have passed. Evaporate this, by means of a water-bath, to four pints, filter, and, having added the Sugar, dissolve it with the aid of heat, and strain the solution while hot. Lastly, rub the Oils with a small portion of the solution, and mix them thoroughly with the remainder.

SYRUPUS SCILLÆ.

Syrup of Squill.

Take of Vinegar of Squill a pint;

Sugar, in coarse powder, twenty-four troyounces.

Dissolve the Sugar in the Vinegar of Squill, with the aid of a gentle heat, and strain the solution while hot.

SYRUPUS SCILLÆ COMPOSITUS.

Compound Syrup of Squill.

Take of Squill, in moderately coarse powder,

Seneka, in moderately fine powder,
each, four troyounces;

Tartrate of Antimony and Potassa
forty-eight grains;

Sugar, in coarse powder, forty-two troyounces;

Diluted Alcohol,

Water, each, a sufficient quantity.

Mix the Squill and Seneka, and, having moistened the mixture with half a pint of Diluted Alcohol, allow it to stand for an hour. Then transfer it to a conical percolator, and pour Diluted Alcohol upon it until three pints of tincture have passed. Boil this for a few minutes, evaporate it

by means of a water-bath to a pint, add six fluid-ounces of boiling Water, and filter. Dissolve the Sugar in the filtered liquid, and, having heated the solution to the boiling point, strain it while hot. Then dissolve the Tartrate of Antimony and Potassa in the solution while still hot, and add sufficient boiling Water, through the strainer, to make it measure three pints. Lastly, mix the whole thoroughly together.

SYRUPUS SENEGÆ.

Syrup of Seneka.

Take of Seneka, in moderately fine powder, four troyounces ;

Sugar, in coarse powder, fifteen troy-ounces ;

Diluted Alcohol two pints.

Moisten the Seneka with two fluidounces of the Diluted Alcohol ; then transfer it to a conical percolator, and gradually pour on it the remainder of the Diluted Alcohol. When the tincture has ceased to pass, evaporate it, by means of a water-bath, at a temperature not exceeding 160°, to half a pint ; then filter, and, having added the Sugar, dissolve it with the aid of a gentle heat, and strain the solution while hot.

SYRUPUS TOLUTANUS.

Syrup of Tolu.

Take of Tincture of Tolu two fluidounces;
Carbonate of Magnesia one hundred
and twenty grains;
Sugar, in coarse powder, twenty-six
troyounces;
Water a pint.

Rub the Tincture of Tolu first with the Carbonate of Magnesia and two troyounces of the Sugar, then with the Water, gradually added, and filter. To the filtered liquid add the remainder of the Sugar, and, having dissolved it with the aid of a gentle heat, strain the solution while hot.

SYRUPUS ZINGIBERIS.

Syrup of Ginger.

Take of Tincture of Ginger six fluidounces;
Carbonate of Magnesia half a troy-ounce;
Sugar, in coarse powder, one hundred
and eight troyounces;
Water four pints.

Evaporate the Tincture to three fluidounces with a gentle heat; then rub it first with the Carbonate of Magnesia and two troyounces of the

Sugar, and afterwards with the Water, gradually added, and filter. To the filtered liquid add the remainder of the Sugar, and, having dissolved it with the aid of a gentle heat, strain the solution while hot.

T I N C T U R Æ.

When Tinctures are prepared by percolation, great care should be taken to observe the directions given at page 3; so that the substances treated may be, as far as possible, exhausted of their soluble principles, and a perfectly clear liquid obtained. When prepared by maceration, they require to be frequently shaken during the process, which should be conducted in glass bottles, well stopped.

TINCTURA ACONITI FOLII.

Tincture of Aconite Leaf.

Tinctura Aconiti Foliorum, *Pharm.*, 1850.

Take of Aconite Leaf, recently dried and in fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical per-

colator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA ACONITI RADICIS.

Tincture of Aconite Root.

Take of Aconite Root, in fine powder, twelve troyounces ;

Alcohol a sufficient quantity.

Moisten the powder with six fluidounces of Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA ALOËS.

Tincture of Aloes.

Take of Socotrine Aloes, in fine powder, a troyounce ;

Liquorice three troyounces ;

Alcohol half a pint ;

Distilled Water a pint and a half.

Macerate for fourteen days, and filter through paper.

TINCTURA ALOËS ET MYRRHÆ.

Tincture of Aloes and Myrrh.

Take of Socotrine Aloes, in moderately fine powder,

Myrrh, in moderately fine powder,
each, three troyounces;

Saffron, in moderately coarse powder,
a troyounce;

Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with two fluidounces of Alcohol, pack it moderately in a conical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

This Tincture may also be prepared by macerating the powders with two pints of Alcohol for fourteen days, and filtering through paper.

TINCTURA ARNICÆ.

Tincture of Arnica.

Take of Arnica six troyounces;

Alcohol a pint and a half;

Water half a pint;

Diluted Alcohol a sufficient quantity.

Mix the Alcohol and Water, and, having moistened the Arnica slightly with the mixture, bruise it thoroughly in a mortar. Then pack it firmly in a cylindrical percolator, and pour upon it, first the remainder of the mixture, and afterwards

sufficient Diluted Alcohol to make the tincture measure two pints.

TINCTURA ASSAFETIDÆ.

Tincture of Assafetida.

Take of Assafetida, bruised, four troyounces ;
Alcohol two pints.

Macerate for fourteen days, and filter through paper.

TINCTURA BELLADONNÆ.

Tincture of Belladonna.

Take of Belladonna Leaf, recently dried and in fine powder, four troyounces ;
Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA BENZOINI COMPOSITA.

Compound Tincture of Benzoin.

Take of Benzoin, in coarse powder, three troy-ounces ;

Socotrine Aloes, in coarse powder, half
a troyounce ;

Storax two troyounces ;

Balsam of Tolu a troyounce ;

Alcohol two pints.

Macerate for fourteen days, and filter through
paper.

TINCTURA CALUMBÆ.

Tincture of Columbo.

Tinctura Colombæ, *Pharm.*, 1850.

Take of Columbo, in moderately fine powder,
four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted
Alcohol, transfer it to a conical percolator, and
gradually pour Diluted Alcohol upon it until two
pints of tincture are obtained.

TINCTURA CANNABIS.

Tincture of Hemp.

Take of Purified Extract of Hemp three hun-
dred and sixty grains ;

Alcohol a pint.

Dissolve the Extract in the Alcohol, and filter
through paper.

TINCTURA CANTHARIDIS.

Tincture of Cantharides.

Take of Cantharides, in fine powder, a troyounce;

Diluted Alcohol a sufficient quantity.

Moisten the powder with half a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CAPSICI.

Tincture of Capsicum.

Take of Capsicum, in fine powder, a troyounce;

Diluted Alcohol a sufficient quantity.

Moisten the powder with half a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CARDAMOMI.

Tincture of Cardamom.

Take of Cardamom, in fine powder, four troy-ounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CARDAMOMI COMPOSITA.

Compound Tincture of Cardamom.

Take of Cardamom, in moderately fine powder,
three hundred and sixty grains;
Caraway, in moderately fine powder,
one hundred and twenty grains;
Cinnamon, in moderately fine powder,
three hundred grains;
Cochineal, in moderately fine powder,
sixty grains;
Clarified Honey two troyounces;
Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with half a fluidounce of Diluted Alcohol, pack it in a cylindrical percolator, and gradually pour Diluted Alcohol upon it until two pints and six fluidounces of tincture are obtained. Lastly, mix this with the Clarified Honey, and filter through paper.

TINCTURA CASTOREI.

Tincture of Castor.

Take of Castor, bruised, two troyounces;
Alcohol two pints.

Macerate for seven days, express, and filter through paper.

TINCTURA CATECHU.

Tincture of Catechu.

Take of Catechu, in moderately coarse powder,
three troyounces ;

Cinnamon, in moderately coarse powder,
two troyounces ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with a fluidounce of Diluted Alcohol, pack it in a conical glass percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CINCHONÆ.

Tincture of Cinchona.

Take of Yellow Cinchona, in moderately fine powder, six troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a glass percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CINCHONÆ COMPOSITA.

Compound Tincture of Cinchona.

Take of Red Cinchona, in moderately fine powder, four troyounces ;

Bitter Orange Peel, in moderately fine powder, three troyounces ;
Serpentaria, in moderately fine powder, three hundred and sixty grains ;
Saffron, in moderately coarse powder,
Red Saunders, in moderately fine powder, each, one hundred and twenty grains ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with four fluidounces of Diluted Alcohol, pack it firmly in a glass percolator, and gradually pour Diluted Alcohol upon it until two pints and a half of tincture are obtained.

TINCTURA CINNAMOMI.

Tincture of Cinnamon.

Take of Cinnamon, in fine powder, three troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Mix Alcohol and Water in the proportion of two measures of the former to one of the latter. Then moisten the powder with a fluidounce of the mixture, pack it moderately in a conical perco-

lator, and gradually pour the mixture upon it until two pints of filtered liquid are obtained.

TINCTURA COLCHICI.

Tincture of Colchicum.

Tinctura Colchici Seminis, *Pharm.*, 1850.

Take of Colchicum Seed, in moderately fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a cylindrical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CONII.

Tincture of Hemlock.

Take of Hemlock, recently dried and in fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA CUBEÆ.

Tincture of Cubeb.

Take of Cubeb, in moderately fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA DIGITALIS.

Tincture of Digitalis.

Take of Digitalis, recently dried and in fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA FERRI CHLORIDI.

Tincture of Chloride of Iron.

Take of Iron, in the form of wire and cut in pieces, three troyounces ;

Muriatic Acid seventeen troyounces and a half ;

Alcohol three pints ;
Nitric Acid,
Distilled Water, each, a sufficient quantity.

Introduce the Iron into a flask of the capacity of two pints, pour upon it eleven troyounces of the Muriatic Acid, and allow the mixture to stand until effervescence has ceased. Then heat it to the boiling point, decant the liquid from the undissolved Iron, filter it through paper, and, having rinsed the flask with a little boiling Distilled Water, add this to it through the filter. Pour the filtered liquid into a capsule of the capacity of four pints, add the remainder of the Muriatic Acid, and, having heated the mixture nearly to the boiling point, add a troyounce and a half of Nitric Acid. When effervescence has ceased, drop in Nitric Acid, constantly stirring, until it no longer produces effervescence. Lastly, when the liquid is cold, add sufficient Distilled Water to make it measure a pint, and mix it with the Alcohol.

A yellowish-brown liquid, having a harsh, acid, styptic taste, and an agreeable ethereal odour. Its specific gravity is 0.990. A fluid-ounce of it, diluted with water, and treated with ammonia in excess, affords a precipitate of sesquioxide of iron, which, when washed, dried, and ignited, weighs twenty-nine grains.

TINCTURA GALLÆ.

Tincture of Nutgall.

Take of Nutgall, in moderately fine powder,
four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a glass percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA GENTIANÆ COMPOSITA.

Compound Tincture of Gentian.

Take of Gentian, in moderately fine powder,
two troyounces ;

Bitter Orange Peel, in moderately fine
powder, a troyounce ;

Cardamom, in moderately fine powder,
half a troyounce ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with a fluidounce and a half of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA GUAIACI.

Tincture of Guaiac.

Take of Guaiac, in moderately coarse powder
six troyounces ;

Alcohol a sufficient quantity.

Mix the powder thoroughly with an equal bulk of dry sand, pack the mixture moderately in a conical percolator, and, having covered it with a layer of sand, gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA GUAIACI AMMONIATA.

Ammoniated Tincture of Guaiac.

Take of Guaiac, in moderately coarse powder,
six troyounces ;

Aromatic Spirit of Ammonia two pints.

Macerate for seven days, and filter through paper.

TINCTURA HELLEBORI.

Tincture of Black Hellebore.

Take of Black Hellebore, in moderately fine powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted

Alcohol, pack it in a cylindrical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA HUMULI.

Tincture of Hops.

Take of Hops, in moderately coarse powder,
five troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it very firmly in a cylindrical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA HYOSCYAMI.

Tincture of Henbane.

Take of Henbane Leaf, in fine powder, four
troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA IODINII.

Tincture of Iodine.

Take of Iodine a troyounce ;

Alcohol a pint.

Dissolve the Iodine in the Alcohol.

TINCTURA IODINII COMPOSITA.

Compound Tincture of Iodine.

Take of Iodine half a troyounce ;

Iodide of Potassium a troyounce ;

Alcohol a pint.

Dissolve the Iodine and Iodide of Potassium in the Alcohol.

TINCTURA JALAPÆ.

Tincture of Jalap.

Take of Jalap, in fine powder, six troyounces ;

Alcohol,

Water, each, a sufficient quantity.

Mix two measures of Alcohol with one of Water. Then moisten the powder with two fluidounces of the mixture, pack it moderately in a cylindrical percolator, and gradually pour the mixture upon it until two pints of tincture are obtained.

TINCTURA KINO.

Tincture of Kino.

Take of Kino, in fine powder, three hundred
and sixty grains ;

Alcohol,

Water, each, a sufficient quantity.

Mix two measures of Alcohol with one of Water.
Then mix the powder thoroughly with an equal
bulk of dry sand, and, having introduced the mix-
ture into a conical glass percolator, gradually pour
the menstruum upon it until half a pint of tinc-
ture is obtained.

TINCTURA KRAMERLÆ.

Tincture of Rhatany.

Take of Rhatany, in moderately fine powder,
six troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of
Diluted Alcohol, pack it in a cylindrical glass per-
colator, and gradually pour Diluted Alcohol upon
it until two pints of tincture are obtained.

TINCTURA LOBELIÆ.

Tincture of Lobelia.

Take of Lobelia, in fine powder, four troyounces ;
Diluted Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Diluted Alcohol, pack it firmly in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA LUPULINÆ.

Tincture of Lupulin.

Take of Lupulin four troyounces ;
Alcohol a sufficient quantity.

Pack the Lupulin in a narrow cylindrical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA MYRRHÆ.

Tincture of Myrrh.

Take of Myrrh, in moderately coarse powder,
three troyounces ;
Alcohol a sufficient quantity.

Introduce the powder into a conical percolator, press it moderately, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA NUCIS VOMICÆ.

Tincture of Nux Vomica.

Take of Nux Vomica, in fine powder, eight troy-ounces ;

Alcohol a sufficient quantity.

Mix the powder with a pint of Alcohol, and digest for twenty-four hours, in a close vessel, with a gentle heat ; then transfer the mixture to a cylindrical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA OPII.

*Tincture of Opium.**Laudanum.*

Take of Opium, dried, and in moderately fine powder, two troyounces and a half ;

Water,

Alcohol, each, a pint ;

Diluted Alcohol a sufficient quantity.

Macerate the Opium with the Water for three days, with frequent agitation ; then add the Alcohol, and continue the maceration for three days longer. Introduce the mixture into a percolator, and, when the liquid has ceased to pass, pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA OPII ACETATA.

Acetated Tincture of Opium.

Take of Opium, dried, and in moderately fine powder, two troyounces;
Vinegar twelve fluidounces;
Alcohol half a pint.

Rub the Opium with the Vinegar; then add the Alcohol, and, having macerated for seven days express, and filter through paper.

TINCTURA OPII CAMPHORATA.

Camphorated Tincture of Opium.

Take of Opium, dried, and in moderately fine powder,
Benzoic Acid, each, sixty grains;
Camphor forty grains;
Oil of Anise a fluidrachm;
Clarified Honey two troyounces;
Diluted Alcohol two pints.

Macerate for seven days, and filter through paper.

TINCTURA OPII DEODORATA.

Deodorized Tincture of Opium.

Take of Opium, dried, and in moderately fine powder, two troyounces and a half;

Ether,
Alcohol, each, half a pint;
Water a sufficient quantity.

Macerate the Opium with half a pint of Water for twenty-four hours, and express; then repeat the operation twice with the same quantity of Water. Mix the expressed liquids, and, having evaporated the mixture to four fluidounces, shake it when cold, in a bottle, repeatedly with the Ether. Pour off the ethereal solution when it has separated by standing, and evaporate the remaining liquid until all traces of ether have disappeared. Mix this with twenty fluidounces of Water, and filter the mixture through paper. When the liquid has ceased to pass, add sufficient Water, through the filter, to make the filtered liquid measure a pint and a half. Lastly, add the Alcohol, and mix them together.

TINCTURA QUASSIÆ.

Tincture of Quassia.

Take of Quassia, in moderately fine powder,
two troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a percolator, and gradually

pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA RHEI.

Tincture of Rhubarb.

Take of Rhubarb, in moderately coarse powder,
three troyounces ;

Cardamom, in moderately fine powder,
half a troyounce ;

Diluted Alcohol a sufficient quantity.

Mix the powders, and, having moistened the mixture with a fluidounce of Diluted Alcohol, pack it moderately in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA RHEI ET SENNÆ.

Tincture of Rhubarb and Senna.

Take of Rhubarb, in moderately coarse powder,
a troyounce ;

Senna, in moderately coarse powder,

Red Saunders, in moderately coarse
powder, each, one hundred and
twenty grains ;

Coriander, in moderately coarse powder,

Fennel, in moderately coarse powder,
each, sixty grains;

Saffron, in moderately coarse powder,

Liquorice, in moderately coarse powder,
each, thirty grains;

Raisins, deprived of their seeds, six
troyounces;

Diluted Alcohol three pints.

Macerate for fourteen days, express, and filter
through paper.

TINCTURA SANGUINARIÆ.

Tincture of Bloodroot.

Take of Bloodroot, in moderately fine powder,
four troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA SCILLÆ.

Tincture of Squill.

Take of Squill, in moderately coarse powder,
four troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA SERPENTARIÆ.

Tincture of Serpentaria.

Take of Serpentaria, in moderately fine powder,
four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA STRAMONII.

Tincture of Stramonium.

Take of Stramonium Seed, in moderately fine
powder, four troyounces ;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA TOLUTANA.

Tincture of Tolu.

Take of Balsam of Tolu three troyounces;
Alcohol two pints.

Macerate the Balsam with the Alcohol until it is dissolved; then filter through paper.

TINCTURA VALERIANÆ.

Tincture of Valerian.

Take of Valerian, in moderately fine powder,
four troyounces;

Diluted Alcohol a sufficient quantity.

Moisten the powder with a fluidounce of Diluted Alcohol, pack it in a conical percolator, and gradually pour Diluted Alcohol upon it until two pints of tincture are obtained.

TINCTURA VALERIANÆ AMMONIATA.

Ammoniated Tincture of Valerian.

Take of Valerian, in moderately fine powder,
four troyounces;

Aromatic Spirit of Ammonia two pints.

Macerate for seven days, express, and filter through paper.

TINCTURA VERATRI VIRIDIS.

Tincture of American Hellebore.

Take of American Hellebore, in moderately fine powder, sixteen troyounces ;

Alcohol a sufficient quantity.

Moisten the powder with four fluidounces of Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TINCTURA ZINGIBERIS.

Tincture of Ginger.

Take of Ginger, in fine powder, eight troyounces ;

Alcohol a sufficient quantity.

Moisten the powder with two fluidounces of Alcohol, pack it firmly in a cylindrical percolator, and gradually pour Alcohol upon it until two pints of tincture are obtained.

TROCHISCI.

TROCHISCI CRETÆ.

Troches of Chalk.

Take of Prepared Chalk four troyounces ;

Gum Arabic, in fine powder, a troy-ounce ;

Nutmeg, in fine powder, sixty grains ;

Sugar, in fine powder, six troyounces.

Rub them together until they are thoroughly mixed ; then with water form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI CUBEÆ.

Troches of Cubeb.

Take of Oleoresin of Cubeb a fluidounce ;

Oil of Sassafras a fluidrachm ;

Liquorice, in fine powder,

Gum Arabic, in fine powder,

Sugar, in fine powder, each, three troy-ounces ;

Syrup of Tolu a sufficient quantity.

Rub the powders together until they are thoroughly mixed ; then add the Oleoresin and Oil, and incorporate them with the mixture. Lastly, with Syrup of Tolu form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI FERRI SUBCARBONATIS.

Troches of Subcarbonate of Iron.

Take of Subcarbonate of Iron five troyounces ;
Vanilla sixty grains ;
Sugar, in fine powder, fifteen troy-
ounces ;
Mucilage of Tragacanth a sufficient
quantity.

Rub the Vanilla first with a part of the Sugar into a uniform powder, and afterwards with the Subcarbonate of Iron and the remainder of the Sugar until they are thoroughly mixed. Then with Mucilage of Tragacanth form a mass, to be divided into troches, each weighing twenty grains.

TROCHISCI GLYCYRRHIZÆ ET OPII.

Troches of Liquorice and Opium.

Take of Opium, in fine powder, half a troyounce ;
Liquorice, in fine powder,
Gum Arabic, in fine powder,
Sugar, in fine powder, each, ten troy-
ounces ;
Oil of Anise a fluidrachm.

Rub the powders together until they are thoroughly mixed ; then add the Oil of Anise, and incorporate it with the mixture. Lastly, with

water form a mass, to be divided into troches, each weighing six grains.

TROCHISCI IPECACUANHÆ.

Troches of Ipecacuanha.

Take of Ipecacuanha, in fine powder, half a troyounce ;

Arrow-root, in fine powder, four troyounces ;

Sugar, in fine powder, fourteen troyounces ;

Mucilage of Tragacanth a sufficient quantity.

Rub the powders together until they are thoroughly mixed ; then with Mucilage of Tragacanth form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI MAGNESIÆ.

Troches of Magnesia.

Take of Magnesia four troyounces ;

Nutmeg, in fine powder, sixty grains ;

Sugar, in fine powder, twelve troyounces ;

Mucilage of Tragacanth a sufficient quantity.

Rub the Magnesia and the powders together until they are thoroughly mixed; then with Mucilage of Tragacanth form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI MENTHÆ PIPERITÆ.

Troches of Peppermint.

Take of Oil of Peppermint a fluidrachm;
Sugar, in fine powder, twelve troy-ounces;
Mucilage of Tragacanth a sufficient quantity.

Rub the Oil of Peppermint with the Sugar until they are thoroughly mixed; then with Mucilage of Tragacanth form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI SODÆ BICARBONATIS.

Troches of Bicarbonate of Soda.

Take of Bicarbonate of Soda four troyounces;
Sugar, in fine powder, twelve troy-ounces;
Mucilage of Tragacanth a sufficient quantity.

Rub the Bicarbonate of Soda with the Sugar

until they are thoroughly mixed; then with Mucilage of Tragacanth form a mass, to be divided into troches, each weighing ten grains.

TROCHISCI ZINGIBERIS.

Troches of Ginger.

Take of Tincture of Ginger a fluidounce;
Tragacanth, in fine powder, one hundred and twenty grains;
Sugar, in fine powder, twelve troy-ounces;
Syrup of Ginger a sufficient quantity.

Mix the Tincture of Ginger with the Sugar, and, having exposed the mixture to the air until dry, reduce it to fine powder; to this add the Tragacanth, and mix it thoroughly. Lastly, with Syrup of Ginger form a mass, to be divided into troches, each weighing twenty grains.

UNGUENTA.

UNGUENTUM ACIDI TANNICI.

Ointment of Tannic Acid.

Take of Tannic Acid thirty grains;

Water half a fluidrachm ;

Lard a troyounce.

Rub the Acid first with the Water, and then with the Lard, until they are thoroughly mixed, avoiding the use of an iron spatula.

UNGUENTUM ADIPIS.

Ointment of Lard.

Unguentum Simplex, *Pharm.*, 1850.

Take of Lard eight troyounces ;

White Wax two troyounces.

Melt them together with a moderate heat, and stir the mixture constantly while cooling.

UNGUENTUM ANTIMONII.

Ointment of Antimony.

Take of Tartrate of Antimony and Potassa, in very fine powder, one hundred and twenty grains ;

Lard a troyounce.

Rub the powder with a little of the Lard ; then add the remainder, and thoroughly mix them.

UNGUENTUM AQUÆ ROSÆ.

Ointment of Rose Water.

Take of Oil of Sweet Almond three troyounces
and a half;

Spermaceti a troyounce;

White Wax one hundred and twenty
grains;

Rose Water two fluidounces.

Melt together, by means of a water-bath, the
Oil, Spermaceti, and Wax; then gradually add
the Rose Water, and stir the mixture constantly
while cooling.

UNGUENTUM BELLADONNÆ.

Ointment of Belladonna.

Take of Extract of Belladonna sixty grains;

Water half a fluidrachm;

Lard a troyounce.

Rub the Extract first with the Water until
rendered uniformly soft, then with the Lard, and
thoroughly mix them.

UNGUENTUM BENZOINI.

Ointment of Benzoin.

Take of Benzoin, in moderately coarse powder,
a troyounce;

Lard sixteen troyounces.

Heat them together, by means of a water-bath, for two hours, with occasional stirring; then strain without pressure, and stir the product constantly while cooling.

UNGUENTUM CREASOTI.

Ointment of Creasote.

Take of Creasote half a fluidrachm;

Lard a troyounce.

Mix them.

UNGUENTUM GALLÆ.

Ointment of Nutgall.

Take of Nutgall, in very fine powder, a troy-ounce;

Lard seven troyounces.

Mix them.

UNGUENTUM HYDRARGYRI.

Ointment of Mercury.

Take of Mercury twenty-four troyounces;

Lard,

Suet, each, twelve troyounces.

Rub the Mercury with a troyounce of the Suet and a small portion of the Lard until the globules cease to be visible; then add the remainder of the

Lard, and of the Suet softened with a gentle heat, and thoroughly mix them.

UNGUENTUM HYDRARGYRI AMMONIATI.

Ointment of Ammoniated Mercury.

Take of Ammoniated Mercury, in very fine powder, forty grains;

Ointment of Lard a troyounce.

Mix them.

UNGUENTUM HYDRARGYRI NITRATIS.

Ointment of Nitrate of Mercury.

Take of Mercury a troyounce and a half;

Nitric Acid three troyounces and a half;

Neats-foot Oil twelve troyounces;

Lard four troyounces and a half.

Dissolve the Mercury in the Acid; then heat together the Oil and Lard in an earthen vessel, and, when the temperature reaches 200°, remove the mixture from the fire. To this add the mercurial solution, and, with a wooden spatula, stir constantly so long as effervescence continues, and afterwards occasionally until the ointment stiffens.

UNGUENTUM HYDRARGYRI OXIDI RUBRI.

Ointment of Red Oxide of Mercury.

Take of Red Oxide of Mercury, in very fine powder, sixty grains ;

Ointment of Lard a troyounce.

Add the Oxide of Mercury to the Ointment previously softened with a gentle heat, and thoroughly mix them.

UNGUENTUM IODINII.

Ointment of Iodine.

Take of Iodine twenty grains ;

Iodide of Potassium four grains ;

Water six minims ;

Lard a troyounce.

Rub the Iodine and Iodide of Potassium first with the Water, and then with the Lard until they are thoroughly mixed.

UNGUENTUM IODINII COMPOSITUM.

Compound Ointment of Iodine.

Take of Iodine fifteen grains ;

Iodide of Potassium thirty grains ;

Water thirty minims ;

Lard a troyounce.

Rub the Iodine and Iodide of Potassium first with the Water, and then with the Lard until they are thoroughly mixed.

UNGUENTUM PICIS LIQUIDÆ.

Tar Ointment.

Take of Tar,

Suet, each, twelve troyounces.

Mix the Tar with the Suet previously melted with a moderate heat, and, having strained the mixture through muslin, stir it constantly while cooling.

UNGUENTUM PLUMBI CARBONATIS.

Ointment of Carbonate of Lead.

Take of Carbonate of Lead, in very fine powder,
eighty grains;

Ointment of Lard a troyounce.

Add the Carbonate of Lead to the Ointment previously softened with a gentle heat, and thoroughly mix them.

UNGUENTUM POTASSII IODIDI.

Ointment of Iodide of Potassium.

Take of Iodide of Potassium, in fine powder,
sixty grains;

Water a fluidrachm ;

Lard a troyounce.

Dissolve the Iodide of Potassium in the Water, and mix the solution with the Lard.

UNGUENTUM STRAMONII.

Ointment of Stramonium.

Take of Extract of Stramonium sixty grains ;

Water half a fluidrachm ;

Lard a troyounce.

Rub the Extract first with the Water until rendered uniformly soft, then with the Lard, and thoroughly mix them.

UNGUENTUM SULPHURIS.

Ointment of Sulphur.

Take of Sublimed Sulphur a troyounce ;

Lard two troyounces.

Mix them.

UNGUENTUM SULPHURIS IODIDI.

Ointment of Iodide of Sulphur.

Take of Iodide of Sulphur thirty grains ;

Lard a troyounce.

Rub the Iodide of Sulphur, first reduced to a fine powder, with a little of the Lard, then add the remainder, and thoroughly mix them.

UNGUENTUM TABACI.

Ointment of Tobacco.

Take of Tobacco, in fine powder, half a troy-ounce ;

Lard eight troyounces ;

Water a sufficient quantity.

Moisten the Tobacco with a little Water, introduce it into a conical glass percolator, and, having pressed it firmly, pour Water upon it until four fluidounces of filtered liquid have passed. Evaporate this to the consistence of a soft extract, and mix it thoroughly with the Lard.

UNGUENTUM VERATRILÆ.

Ointment of Veratria.

Take of Veratria twenty grains ;

Lard a troyounce.

Rub the Veratria with a little of the Lard ; then add the remainder, and thoroughly mix them.

UNGUENTUM ZINCI OXIDI.

Ointment of Oxide of Zinc.

Take of Oxide of Zinc eighty grains ;

Lard a troyounce.

Mix them.

V E R A T R I A.

VERATRIA.

Veratria.

Take of Cevadilla, in moderately fine powder,
twenty-four troyounces ;

Alcohol,

Sulphuric Acid,

Magnesia,

Water of Ammonia,

Purified Animal Charcoal,

Water, each, a sufficient quantity.

Digest the Cevadilla with eight pints of Alcohol, for four hours, in a distillatory apparatus, with a heat approaching to boiling, and pour off the liquid. To the residue add eight pints more of Alcohol mixed with the portion distilled, and, having digested for an hour, pour off the liquid as before. Digest for a third time with the same quantity of Alcohol, together with the portion last distilled, and again pour off. Press the remains of the Cevadilla, mix and strain the liquids, and, by means of a water-bath, distil off the alcohol. Boil the residue three or four times in Water acidulated with Sulphuric Acid, mix and strain

the liquids, and evaporate to the consistence of syrup. Add Magnesia in slight excess, shake the mixture frequently, then express, and wash what remains. Repeat the expression and washing two or three times, and, having dried the residue, digest it with a gentle heat several times in Alcohol, and strain after each digestion. Distil off the alcohol from the mixed liquids, boil the residue for fifteen minutes in Water mixed with a little Sulphuric Acid and Purified Animal Charcoal, and strain. Having thoroughly washed what remains, mix the washings with the strained liquid, evaporate with a moderate heat to the consistence of thin syrup, and drop in sufficient Water of Ammonia to precipitate the Veratria. Lastly, wash the alkaloid with water, and dry it with a gentle heat.

Veratria, thus prepared, is pulverulent, grayish-white, inodorous but very irritant to the nostrils, and of an acrid, bitter taste, causing a sensation of tingling with numbness in the tongue. It is very slightly soluble in water, but readily and wholly dissolved by alcohol. It has an alkaline reaction, and is entirely dissipated by a red heat. With nitric acid it forms a yellow solution, and, by contact with concentrated sulphuric acid, becomes intensely red.

V I N A.

VINUM ALOËS.

Wine of Aloes.

Take of Socotrine Aloes, in fine powder, a troy-ounce ;

Cardamom, in moderately fine powder,
Ginger, in moderately fine powder,
each, sixty grains ;

Sherry Wine a pint.

Macerate for seven days, with occasional agitation, and filter through paper.

VINUM ANTIMONII.

Wine of Antimony.

Take of Tartrate of Antimony and Potassa
thirty-two grains ;

Boiling Distilled Water a fluidounce ;
Sherry Wine a sufficient quantity.

Dissolve the salt in the Distilled Water, and, while the solution is hot, add sufficient Sherry Wine to make it measure a pint.

VINUM COLCHICI RADICIS.

Wine of Colchicum Root.

Take of Colchicum Root, in moderately fine powder, twelve troyounces;

Sherry Wine a sufficient quantity.

Moisten the powder with four fluidounces of Sherry Wine, pack it firmly in a conical percolator, and gradually pour Sherry Wine upon it until two pints of filtered liquid are obtained.

VINUM COLCHICI SEMINIS.

Wine of Colchicum Seed.

Take of Colchicum Seed, in moderately coarse powder, four troyounces;

Sherry Wine two pints.

Macerate for fourteen days, with occasional agitation; then express, and filter through paper.

VINUM ERGOTÆ.

Wine of Ergot.

Take of Ergot, in moderately fine powder, four troyounces;

Sherry Wine a sufficient quantity.

Moisten the powder with a fluidounce of Sherry Wine, pack it in a conical percolator, and grad-

ually pour Sherry Wine upon it until two pints of filtered liquid are obtained.

VINUM IPECACUANHÆ.

Wine of Ipecacuanha.

Take of Ipecacuanha, in moderately fine powder, two troyounces ;

Sherry Wine a sufficient quantity.

Moisten the powder with half a fluidounce of Sherry Wine, pack it moderately in a conical percolator, and gradually pour Sherry Wine upon it until two pints of filtered liquid are obtained.

VINUM OPII.

Wine of Opium.

Take of Opium, dried, and in moderately fine powder, two troyounces ;

Cinnamon, in moderately fine powder,

Cloves, in moderately fine powder, each, sixty grains ;

Sherry Wine a sufficient quantity.

Mix the powders with fifteen fluidounces of Sherry Wine, and macerate for seven days, with occasional agitation ; then transfer the mixture to a conical percolator, and, when the liquid has

passed the surface, gradually pour on Sherry Wine until a pint of filtered liquid is obtained.

VINUM RHEI.

Wine of Rhubarb.

Take of Rhubarb, in moderately coarse powder,
two troyounces ;

Canella, in moderately fine powder,
sixty grains ;

Sherry Wine fourteen fluidounces ;

Diluted Alcohol a sufficient quantity.

Mix two fluidounces of Diluted Alcohol with the Sherry Wine, and moisten the powders, previously rubbed together, with half a fluidounce of the mixture ; then transfer them to a conical percolator, and gradually pour upon them the remainder of the mixture, and afterwards Diluted Alcohol, until a pint of filtered liquid is obtained.

VINUM TABACI.

Wine of Tobacco.

Take of Tobacco, in moderately fine powder,
a troyounce ;

Sherry Wine a pint.

Macerate for seven days, with occasional agitation ; then express, and filter through paper.

ZINCUM.

ZINCI ACETAS.

Acetate of Zinc.

Take of Acetate of Lead twelve troyounces ;
Zinc, granulated, nine troyounces ;
Distilled Water a sufficient quantity.

Dissolve the Acetate of Lead in three pints of Distilled Water, and filter. Then add the Zinc to the solution, and agitate the mixture occasionally, in a stopped bottle, for five or six hours, or until the liquid yields no precipitate with a solution of iodide of potassium. Filter the liquid, evaporate it with a moderate heat to one-fifth, acidulate it slightly with acetic acid, and set it aside to crystallize. Pour off the liquid, and dry the crystals on bibulous paper.

Should the crystals be coloured, dissolve them in a pint and a half of Distilled Water, and, having heated the solution to ebullition, drop into it, while boiling, recently precipitated carbonate of zinc, in successive portions, until a small quantity of the liquid, on being filtered, passes colourless. Then filter the liquid, acidulate it slightly with acetic acid, and evaporate that crystals may form.

In white, micaceous crystals, which effloresce in a dry atmosphere, and are very soluble in water. The solution yields white precipitates with ferrocyanide of potassium and hydrosulphate of ammonia. The salt is decomposed by sulphuric acid with the escape of acetous vapours.

ZINCI CARBONAS PRÆCIPITATA.

Precipitated Carbonate of Zinc.

Zinci Carbonas Præcipitatus, *Pharm.*, 1850.

Take of Sulphate of Zinc,

Carbonate of Soda, each, twelve troy-
ounces ;

Water eight pints.

Dissolve the salts separately, with the aid of heat, each in four pints of the Water. Then mix the solutions, and, having stirred the mixture, set it by that the precipitate may subside. Lastly, having poured off the supernatant liquid, wash the precipitate with hot water until the washings are nearly tasteless, and dry it with a gentle heat.

ZINCI CHLORIDUM.

Chloride of Zinc.

Take of Zinc, in small pieces, two troyounces
and a half ;

Nitric Acid,

Prepared Chalk, each, sixty grains ;

Muriatic Acid,

Water, each, a sufficient quantity.

To the Zinc, in a glass or porcelain vessel, add gradually sufficient Muriatic Acid to dissolve it; then strain the solution, add the Nitric Acid, and evaporate to dryness. Dissolve the dry mass in five fluidounces of Water, add the Chalk, and allow the mixture to stand for twenty-four hours; then filter into an evaporating basin, and again evaporate to dryness. Lastly, fuse the dry mass in the basin, pour out the liquid on a flat stone, and, when it has congealed, break the mass in pieces, and keep the fragments in a well-stopped bottle.

A white, deliquescent salt, wholly soluble in water, alcohol, and ether. Its aqueous solution yields with nitrate of silver a white precipitate insoluble in nitric acid. It forms white precipitates also with ferrocyanide of potassium and hydrosulphate of ammonia.

ZINCI OXIDUM.

Oxide of Zinc.

Take of Precipitated Carbonate of Zinc twelve troyounces.

Expose it, in a shallow vessel, to a low-red heat, until the water and carbonic acid are wholly expelled.

A yellowish-white powder, insoluble in water, but soluble in dilute sulphuric and muriatic acids without effervescence. The solutions, when neutral, yield white precipitates with ferrocyanide of potassium and hydrosulphate of ammonia.

ZINCI VALERIANAS.

Valerianate of Zinc.

Take of Valerianate of Soda two troyounces
and a half;

Sulphate of Zinc two troyounces and
four hundred and twenty grains;

Distilled Water a sufficient quantity.

Dissolve the salts separately, each in twenty fluidounces of Distilled Water, and, having heated the solutions to 212° , mix them, and set the mixture aside to crystallize. Decant the mother-water from the crystals, and put them upon a filter in a funnel to drain. Mix the mother-water and the drainings, evaporate at a heat not exceeding 200° to four fluidounces, and again set aside to crystallize. Add the crystals, thus obtained, to those in the funnel, wash the whole with a little Distilled Water, and, having removed them with the filter, spread them on bibulous paper, and dry them with a heat not exceeding 200° .

A white, anhydrous salt, in the form of pearly scales, having a faint odour of valerianic acid, and a metallic, styptic taste. It dissolves in one hundred and sixty parts of water, and in sixty of alcohol of the specific gravity 0·833. The solutions have an acid reaction, and become turbid when heated and clear again on cooling. When the salt is distilled with sulphuric acid, the distillate, added to a concentrated solution of acetate of copper, does not disturb its transparency.

TABLES.

I. TABLE OF MEDICINES INTRODUCED INTO THE MATERIA MEDICA.

Primary List.

Acidum Chromicum.	Chromic Acid.
Acidum Lacticum.	Lactic Acid.
Acidum Phosphoricum Glaciale.	Glacial Phosphoric Acid.
Alcohol Amylicum.	Amylic Alcohol.
Alcohol Fortius.	Stronger Alcohol.
Aluminæ et Ammoniæ Sulphas.	{ Sulphate of Alumina and Ammonia.
Ammoniæ Sulphas.	
Aurantii Flores.	Sulphate of Ammonia.
Belladonnæ Radix.	Orange Flowers.
Cadmium.	Belladonna Root.
Caffea.	Cadmium.
Canna.	Coffee.
Chiretta.	Canna.
Chloroformum Venale.	Chiretta.
Fermentum.	Commercial Chloroform.
Ferri Sulphuretum.	Yeast.
Gutta-percha.	Sulphuret of Iron.
Ignatia.	Gutta-percha.
Leptandra.	Ignatia.
Limonis Succus.	Leptandra.
Lini Farina.	Lemon Juice.
Lithiæ Carbonas.	Flaxseed Meal.
Lycopodium.	Carbonate of Lithia.
Manganesii Oxidum Nigrum.	Lycopodium.
	Black Oxide of Manganese.

Manganesii Sulphas.	Sulphate of Manganese.
Mastiche.	Mastic.
Matico.	Matico.
Nectandra.	Nectandra.
Oleum Camphoræ.	Oil of Camphor.
Oleum Theobromæ.	Oil of Theobroma.
Oleum Thymi.	Oil of Thyme.
Pepo.	Pumpkin Seed.
Phosphorus.	Phosphorus.
Potassæ Bichromas.	Bichromate of Potassa.
Potassæ Permanganas.	Permanganate of Potassa.
Saccharum Lactis.	Sugar of Milk.
Santonica.	Santonica.
Sodæ Sulphis.	Sulphite of Soda.
Spiritus Frumenti.	Whisky.
Spiritus Myrciæ.	Spirit of Myrcia.
Syrupus Fuscus.	Molasses.
Vanilla.	Vanilla.

Secondary List.

Achillea.	Yarrow.
Angelica (<i>root of Angelica Arch-</i> <i>angelica</i>).	} Angelica.
Berberis.	Barberry.
Brayera.	Koosso.
Cypripedium.	Cypripedium.
Delphinium (<i>seed</i>).	Larkspur.
Euonymus.	Wahoo.
Gelsemium.	Yellow Jasmine.
Gossypii Radix.	Cotton Root.
Hydrastis.	Hydrastis.
Rottlera.	Kameela.
Rumex.	Yellow Dock.
Scutellaria.	Scullcap.

II. TABLE OF MEDICINES DISMISSED FROM THE MATERIA MEDICA.

Primary List.

Althææ Flores.	Marshmallow Flowers.
Armoracia.	Horse-radish.
Calamina.	Calamine.
Cantharis Vittata.	Potato Flies.
Cinchona.*	Peruvian Bark.*
Conii Semen.	Hemlock Seed.
Limon.	Lemon.
Origanum.	Origanum.
Sapo Vulgaris.	Common Soap.
Spongia.	Sponge.
Stannum.	Tin.
Stramonii Radix.	Stramonium Root.
Succinum.	Amber.

Secondary List.

Angelica (root and herb of <i>Angelica atropurpurea</i>).	} Angelica.
Asclepias Incarnata.	Flesh-coloured Asclepias.
Asclepias Syriaca.	Common Silk-weed.
Castanea.	Chinquapin.
Contrayerva.	Contrayerva.
Convolvulus Panduratus.	Wild Potato.
Delphinium (root).	Larkspur.
Eryngium.	Button Snakeroot.
Erythronium.	Erythronium.
Heracleum.	Masterwort.
Rumex Britannica.	Water Dock.
Rumex Obtusifolius.	Blunt-leaved Dock.
Wintera.	Winter's Bark.

* Dismissed as a name denoting any one of the officinal varieties of Peruvian bark indifferently.

III. TABLE OF MEDICINES INTRODUCED INTO THE PREPARATIONS.

Acetum Lobeliæ.	Vinegar of Lobelia.
Acetum Sanguinariæ.	Vinegar of Bloodroot.
Acidum Hydriodicum Dilutum.	Diluted Hydriodic Acid.
Acidum Nitromuriaticum Dilutum.	} Diluted Nitromuriatic Acid.
Acidum Phosphoricum Dilutum.	
Acidum Sulphurosum.	Sulphurous Acid.
Acidum Valerianicum.	Valerianic Acid.
Æther Fortior.	Stronger Ether.
Aloe Purificata.	Purified Aloes.
Aluminæ Sulphas.	Sulphate of Alumina.
Ammoniæ Valerianas.	Valerianate of Ammonia.
Antimonii Oxidum.	Oxide of Antimony.
Antimonii Oxysulphuretum.	Oxysulphuret of Antimony.
Aqua Aurantii Florum.	Orange Flower Water.
Aqua Chlorinii.	Chlorine Water.
Aqua Creasoti.	Creasote Water.
Atropia.	Atropia.
Atropiæ Sulphas.	Sulphate of Atropia.
Bismuthi Subcarbonas.	Subcarbonate of Bismuth.
Cadmii Sulphas.	Sulphate of Cadmium.
Calcis Phosphas Præcipitata.	Precipitated Phosphate of Lime.
Ceratum Extracti Cantharidis.	Cerate of Extract of Cantharides.
Cinchoniæ Sulphas.	Sulphate of Cinchonia.
Collodium cum Cantharide.	Collodion with Cantharides.
Emplastrum Antimonii.	Plaster of Antimony.
Emplastrum Arnicæ.	Plaster of Arnica.
Emplastrum Picis Canadensis.	Plaster of Canada Pitch.
Extractum Arnicæ Alcoholicum.	Alcoholic Extract of Arnica.
Extractum Buchu Fluidum.	Fluid Extract of Buchu.
Extractum Cannabis Purificatum.	Purified Extract of Hemp.
Extractum Cimicifugæ Fluidum.	Fluid Extract of Cimicifuga.
Extractum Cinchonæ Fluidum.	Fluid Extract of Cinchona.
Extractum Colchici Radicis Fluidum.	} Fluid Extract of Colchicum Root.

Extractum Colchici Seminis Fluidum.	} Fluid Extract of Colchicum Seed.
Extractum Colocynthis Alcoholicum.	} Alcoholic Extract of Colocynth.
Extractum Conii Fluidum.	Fluid Extract of Hemlock.
Extractum Digitalis Alcoholicum.	Alcoholic Extract of Digitalis.
Extractum Dulcamaræ Fluidum.	Fluid Extract of Bittersweet.
Extractum Ergotæ Fluidum.	Fluid Extract of Ergot.
Extractum Gentianæ Fluidum.	Fluid Extract of Gentian.
Extractum Hyoseyami Fluidum.	Fluid Extract of Henbane.
Extractum Ignatiæ Alcoholicum.	Alcoholic Extract of Ignatia.
Extractum Ipecacuanhæ Fluidum.	Fluid Extract of Ipecacuanha.
Extractum Lupulinæ Fluidum.	Fluid Extract of Lupulin.
Extractum Pruni Virginianæ Fluidum.	} Fluid Extract of Wild-cherry Bark.
Extractum Sarsaparillæ Fluidum (<i>simple fluid extract</i>).	} Fluid Extract of Sarsaparilla.
Extractum Senegæ Alcoholicum.	Alcoholic Extract of Seneka.
Extractum Serpentariæ Fluidum.	Fluid Extract of Serpentaria.
Extractum Spigeliæ Fluidum.	Fluid Extract of Spigelia.
Extractum Stramonii Alcoholicum.	} Alcoholic Extract of Stramonium.
Extractum Taraxaci Fluidum.	Fluid Extract of Dandelion.
Extractum Uvæ Ursi Fluidum.	Fluid Extract of Uva Ursi.
Extractum Valerianæ Alcoholicum.	} Alcoholic Extract of Valerian.
Extractum Veratri Viridis Fluidum.	Fluid Extract of American Hellebore.
Extractum Zingiberis Fluidum.	Fluid Extract of Ginger.
Ferri Chloridum.	Chloride of Iron.
Ferri et Ammoniac Citras.	Citrate of Iron and Ammonia.
Ferri et Ammoniac Sulphas.	Sulphate of Iron and Ammonia.
Ferri et Ammoniac Tartras.	Tartrate of Iron and Ammonia.
Ferri et Quiniæ Citras.	Citrate of Iron and Quinia.
Ferri Lactas.	Lactate of Iron.
Ferri Pyrophosphas.	Pyrophosphate of Iron.
Ferri Sulphas Exsiccata.	Dried Sulphate of Iron.
Infusum Juniperi.	Infusion of Juniper.
Infusum Pareiræ.	Infusion of Pareira Brava.

Infusum Picis Liquidæ.	Infusion of Tar.
Infusum Salviæ.	Infusion of Sage.
Linimentum Chloroformi.	Liniment of Chloroform.
Liquor Ferri Citratis.	Solution of Citrate of Iron.
Liquor Ferri Subsulphatis.	Solution of Subsulphate of Iron.
Liquor Ferri Tersulphatis.	Solution of Tersulphate of Iron.
Liquor Gutta-perchæ.	Solution of Gutta-percha.
Liquor Hydrargyri Nitratis.	Solution of Nitrate of Mercury.
Liquor Sodæ.	Solution of Soda.
Mel Sodæ Boratis.	Honey of Borate of Soda.
Mistura Chloroformi.	Mixture of Chloroform.
Oleoresina Capsici.	Oleoresin of Capsicum.
Oleoresina Lupulinæ.	Oleoresin of Lupulin.
Oleoresina Zingiberis.	Oleoresin of Ginger.
Oleum Erigerontis Canadensis.	Oil of Canada Fleabane.
Pilulæ Aloës et Mastiches.	Pills of Aloes and Mastic.
Pilulæ Antimonii Compositæ.	Compound Pills of Antimony.
Pulveres Effervescentes.	Effervescing Powders.
Pulveres Effervescentes Aperientes.	} Aperient Effervescing Powders.
Pulvis Rhei Compositus.	
Quiniæ Valerianas.	Compound Powder of Rhubarb.
Resina Jalapæ.	Valerianate of Quinia.
Resina Podophylli.	Resin of Jalap.
Resina Scammonii.	Resin of May-apple.
Santoninum.	Resin of Scammony.
Sodæ Valerianas.	Santonin.
Spiritus Anisi.	Valerianate of Soda.
Spiritus Chloroformi.	Spirit of Anise.
Spiritus Cinnamomi.	Spirit of Chloroform.
Spiritus Limonis.	Spirit of Cinnamon.
Strychniæ Sulphas.	Spirit of Lemon.
Syrupus Aurantii Florum.	Sulphate of Strychnia.
Syrupus Lactucarii.	Syrup of Orange Flowers.
Syrupus Rosæ Gallicæ.	Syrup of Lactucarium.
Syrupus Rubi.	Syrup of Red Rose.
Tinctura Arnicæ.	Syrup of Blackberry Root.
Tinctura Cannabis.	Tincture of Arnica.
Tinctura Opii Deodorata.	Tincture of Hemp.
	Deodorized Tincture of Opium.

Tinctura Veratri Viridis.	Tincture of American Hellebore.
Trochisci Cubebæ.	Troches of Cubeb.
Trochisci Ferri Subcarbonatis.	Troches of Subcarbonate of Iron.
Trochisci Zingiberis.	Troches of Ginger.
Unguentum Acidi Tannici.	Ointment of Tannic Acid.
Unguentum Benzoini.	Ointment of Benzoin.
Unguentum Veratriæ.	Ointment of Veratria.
Zinci Valerianas.	Valerianate of Zinc.

IV. TABLE OF MEDICINES DISMISSED FROM THE PREPARATIONS.

Calamina Præparata.	Prepared Calamine.
Cassiæ Fistulæ Pulpa.	Pulp of Purging Cassia.
Ceratum Calaminæ.	Calamine Cerate.
Extractum Aconiti.	Extract of Aconite.
Extractum Cinchonæ Rubræ.	Extract of Red Bark.
Extractum Sarsaparillæ.	Extract of Sarsaparilla.
Extractum Stramonii Seminis.	Extract of Stramonium Seed.
Ferri Iodidum.	Iodide of Iron.
Ferrum Ammoniatum.	Ammoniated Iron.
Hydrargyri Oxidum Nigrum.	Black Oxide of Mercury.
Hydrargyri Sulphuretum Nigrum.	Black Sulphuret of Mercury.
Infusum Armoraciæ.	Infusion of Horse-radish.
Infusum Cinchonæ Rubræ } (<i>simple infusion</i>).	Infusion of Red Bark.
Infusum Sarsaparillæ.	Infusion of Sarsaparilla.
Linimentum Saponis Camphoratum.	Camphorated Soap Liniment.
Liquor Potassæ Carbonatis.	Solution of Carbonate of Potassa.
Oleum Origanum.	Oil of Origanum.
Oxymel Scillæ.	Oxymel of Squill.
Pilulæ Hydrargyri Chloridi Mitis.	Pills of Mild Chloride of Mercury.
Pruni Pulpa.	Pulp of Prunes.
Spiritus Pimentæ.	Spirit of Pimento.
Spiritus Rosmarini.	Spirit of Rosemary.

Spongia Usta.	Burnt Sponge.
Stanni Pulvis.	Powder of Tin.
Styrax Purificata.	Purified Storax.
Syrupus Sennæ.	Syrup of Senna.
Tamarindi Pulpa.	Pulp of Tamarinds.
Tinctura Cinnamomi Composita.	Compound Tincture of Cinnamon.
Tinctura Rhei et Aloës.	Tincture of Rhubarb and Aloes.
Tinctura Rhei et Gentianæ.	Tincture of Rhubarb and Gentian.
Tinctura Sennæ et Jalapæ.	Tincture of Senna and Jalap.
Unguentum Cantharidis.	Ointment of Spanish Flies.
Unguentum Cupri Subacetatis.	Ointment of Subacetate of Copper.
Unguentum Mezerei.	Ointment of Mezereon.
Unguentum Sulphuris Compositum.	} Compound Sulphur Ointment.
Unguentum Veratri Albi.	
Vinum Veratri Albi.	Wine of White Hellebore.

V. TABLE OF CHANGES IN THE LATIN OFFICINAL NAMES.

NAMES OF THE PHARMACOPŒIA OF 1850.	NEW NAMES.
Aconiti Folia.	Aconiti Folium.
Aloe.	{ Aloe Barbadosensis.
	{ Aloe Capensis.
	{ Aloe Socotrina.
Althææ Radix.	Althæa.
Antimonii Sulphuretum Præcipitatum.	} Antimonium Sulphuratum.
Argenti Cyanuretum.	
Argenti Nitras Fusus.	Argenti Nitras Fusa.
Asclepias Tuberosa.	Asclepias.
Aurantii Cortex.	{ Aurantii Amari Cortex.
	{ Aurantii Dulcis Cortex.
Belladonna.	Belladonnæ Folium.
Calcis Carbonas Præcipitatus.	Calcis Carbonas Præcipitata.
Ceratum Simplex.	Ceratum Adipis.
Chloroformum.	Chloroformum Purificatum.

NAMES OF THE PHARMACOPŒIA OF 1850.

NEW NAMES.

Colomba.	Calumba.
Conii Folia.	Conium.
Erigeron Heterophyllum. }	Erigeron.
Erigeron Philadelphicum. }	
Extractum Cinchonæ Flavæ.	Extractum Cinchonæ.
Extractum Cubebæ Fluidum.	Oleoresina Cubebæ.
Extractum Hellebori.	Extractum Hellebori Alcoholicum.
Extractum Nucis Vomicae.	{ Extractum Nucis Vomicae Alco-
	holicum.
Extractum Piperis Fluidum.	Oleoresina Piperis.
Extractum Rhei.	Extractum Rhei Alcoholicum.
Extractum Sarsaparillæ Flui-	Extractum Sarsaparillæ Fluidum
dum.	Compositum.
Extractum Stramonii Foliorum.	Extractum Stramonii.
Ferri Ferrocyanuretum.	Ferri Ferrocyanidum.
Ferri Filum. }	Ferrum.
Ferri Ramenta. }	
Ferri Pulvis.	Ferrum Redactum.
Hydrargyri Cyanuretum.	Hydrargyri Cyanidum.
Hydrargyri Iodidum.	Hydrargyri Iodidum Viride.
Hydrargyri Sulphas Flavus.	Hydrargyri Sulphas Flava.
Hyoscyami Folia.	Hyoscyami Folium.
Infusum Cinchonæ Compositum.	Infusum Cinchonæ Rubræ.
Infusum Colombæ.	Infusum Calumbæ.
Infusum Sassafras Medullæ.	Mucilago Sassafras.
Infusum Ulmi.	Mucilago Ulmi.
Liquor Ammonia.	Aqua Ammonia.
Liquor Ammonia Fortior.	Aqua Ammonia Fortior.
Liquor Ferri Iodidi.	Syrupus Ferri Iodidi.
Liquor Potassæ Citratis.	Mistura Potassæ Citratis.
Oleum Amygdalæ.	Oleum Amygdalæ Dulcis.
Phytolaccæ Baccæ.	Phytolaccæ Bacca.
Plumbi Oxidum Semivitreum.	Plumbi Oxidum.
Potassæ Carbonas Impurus.	Potassæ Carbonas Impura.
Potassæ Carbonas Purus.	Potassæ Carbonas Pura.
Potassii Cyanuretum.	Potassii Cyanidum.
Potassii Ferrocyanuretum.	Potassii Ferrocyanidum.
Pulvis Ipecacuanhæ et Opii.	Pulvis Ipecacuanhæ Compositus.

NAMES OF THE PHARMACOPŒIA OF 1850.

NEW NAMES.

Rubus Trivialis. }	Rubus.
Rubus Villosus. }	
Sesami Folia.	Sesami Folium.
Sinapis.	{ Sinapis Alba.
	{ Sinapis Nigra.
Sodæ Carbonas Exsiccatus.	Sodæ Carbonas Exsiccata.
Sodæ et Potassæ Tartras.	Potassæ et Sodæ Tartras.
Spiritus Ætheris Nitrici.	Spiritus Ætheris Nitrosi.
Stramonii Folia.	Stramonii Folium.
Sulphur.	Sulphur Sublimatum.
Tinctura Aconiti Foliorum.	Tinctura Aconiti Folii.
Tinctura Camphoræ.	Spiritus Camphoræ.
Tinctura Colchici Seminis.	Tinctura Colchici.
Tinctura Colombæ.	Tinctura Calumbæ.
Tinctura Olei Menthæ Piperitæ.	Spiritus Menthæ Piperitæ.]
Tinctura Olei Menthæ Viridis.	Spiritus Menthæ Viridis.
Tinctura Saponis Camphorata.	Linimentum Saponis.
Ulmus.	Ulmus Fulva.
Unguentum Simplex.	Unguentum Adipis.
Vinum Album.	Vinum Xericum.
Vinum Rubrum.	Vinum Portense.
Zinci Carbonas Præcipitatus.	Zinci Carbonas Præcipitata.

VI. TABLE OF CHANGES IN THE POSITION OF MEDICINES.

*Medicines transferred from the Primary to the Secondary List
of the Materia Medica.*

Calamus.	Sweet Flag.*
Sabbatia.	American Centaury.†

* English officinal name changed to Calamus.

† English officinal name changed to Sabbatia.

*Medicines transferred from the Secondary to the Primary List
of the Materia Medica.*

Arnica.	Leopard's-bane.*
Cataria.	Catnep.
Coptis.	Goldthread.
Erigeron Canadense.	Canada Fleabane.
Erigeron Heterophyllum. } †	{ Various-leaved Fleabane.
Erigeron Philadelphicum. } †	{ Philadelphia Fleabane.
Extractum Cannabis.	Extract of Hemp.
Filix Mas.	Male Fern.
Macis.	Mace.
Marrubium.	Horehound.
Matricaria.	German Chamomile.
Oleum Cajuputi.	Cajeput Oil.‡
Pareira.	Pareira Brava.
Rubus Trivialis. } §	{ Dewberry-root.
Rubus Villosus. } §	{ Blackberry-root.
Salvia.	Sage.
Sambucus.	Elder Flowers.
Scoparius.	Broom.

*Medicines transferred from the Preparations to the Primary
List of the Materia Medica.*

Alcohol Dilutum.	Diluted Alcohol.
Ammoniaë Carbonas.	Carbonate of Ammonia.
Glycerina.	Glycerin.
Oleum Succini.	Oil of Amber.
Zinci Sulphas.	Sulphate of Zinc.

* English officinal name changed to Arnica.

† Consolidated, in their new position, under the name of Erigeron; English officinal name, Fleabane.

‡ English officinal name changed to Oil of Cajeput.

§ Consolidated, in their new position, under the name of Rubus; English officinal name, Blackberry Root.

|| English officinal name changed to Elder.

VII. TABLE OF CHANGES IN THE MEANING OF NAMES.

Angelica.	{	Name of the dismissed medicine, defined to be the root and herb of Angelica atropurpurea, now given to the introduced medicine, defined to be the root of Angelica Archangelica.
Delphinium.	{	Name of the dismissed medicine, defined to be the root of Delphinium Consolida, now given to the introduced medicine, consisting of the seed of the same plant.
Extractum Sarsaparillæ Fluidum.	{	Name disused as applied to the compound fluid extract, now called Extractum Sarsaparillæ Fluidum Compositum, and given to the introduced simple fluid extract.
Infusum Cinchonæ Rubræ.	{	Name of the dismissed simple infusion of red cinchona, now given to the infusion, formerly called Infusum Cinchonæ Compositum.

INDEX.*

		PAGE
A		
	PAGE	
Absinth'ium.....	9	Acidum Hydriō'dicum Dilū'tum 71
Acē'cia.....	9	Acidum Hydrocēan'icum Dilū'- tum 73
AcETA	65	Acidum Lac'ticum 11
Acetate of Lead.....	42	Acidum Mūriā'ticum..... 11
Acetate of Morphia.....	238	Acidum Mūriā'ticum Dilū'tum... 74
Acetate of Potassa.....	261	Acidum Nī'tricum..... 12
Acetate of Soda.....	50	Acidum Nī'tricum Dilū'tum..... 75
Acetate of Zinc.....	359	Acidum Nī'tromūriā'ticum..... 75
Acetated Tincture of Opium.....	333	Acidum Nī'tromūriā'ticum Dilū'- tum 75
Acetic Acid.....	10	Acidum Phosphor'icum Dilū'tum 76
Acetic Extract of Colchicum	146	Acidum Phosphor'icum Glaçiā'le 12
Acē'tum	9	Acidum Sulphū'ricum..... 12
Acē'tum Col'chici.....	65	Acidum Sulphū'ricum Arōmat'ī- cum..... 78
Acē'tum Destillā'tum	66	Acidum Sulphū'ricum Dilū'tum.. 78
Acē'tum Lobē'liæ.....	66	Acidum Sulphūrō'sum..... 79
Acē'tum Opii.....	67	Acidum Tan'nicum 80
Acē'tum Sanguinā'riæ	68	Acidum Tartar'icum..... 12
Acē'tum Scillæ.....	68	Acidum Valērian'icum 81
Achillēa	56	Aconite Leaf..... 13
AcIDA.....	69	Aconite Root..... 13
Acidum Acē'ticum	10	ACONITIA..... 82
Acidum Acē'ticum Dilū'tum	69	Acōnī'tia..... 82
Acidum Arsēniō'sum.....	10	Acōnī'ti Fo'lia 13
Acidum Benzō'icum.....	69	Acōnīti Fo'lium..... 13
Acidum Chrō'micum.....	10	Acōnīti Rā'dix 13
Acidum Cl'tricum.....	11	Ad'eps..... 13
Acidum Gal'licum.....	70	

* In this Index the titles of groups of medicines and other headings are distinguished by SMALL CAPITALS; the changed official Latin names of the Pharmacopœia of 1850, by *Italics*.

	PAGE		PAGE
Adhesive Plaster.....	141	Ammoniac	15
Æthër.....	84	Ammōnī'acum.....	15
Æthër For'tior	86	Ammō'niæ Carbō'nas.....	15
ÆTHEREA	84	Ammō'niæ Mū'riās.....	15
Al'cōhol	13	Ammō'niæ Sulphas	16
Al'cōhol Amyl'icūm.....	13	Ammō'niæ Valēriā'nas.....	91
Al'cōhol Dilū'tum	14	Ammoniated Copper.....	130
Al'cōhol For'tius.....	14	Ammoniated Mercury.....	201
Alcoholic Extract of Aconite.....	142	Ammoniated Tincture of Guaiac..	327
Alcoholic Extract of Arnica.....	143	Ammoniated Tincture of Valerian	338
Alcoholic Extract of Belladonna..	144	Ammonio-ferrie Alum.....	182
Alcoholic Extract of Black Helle- bore.....	151	Amyg'dāla Amā'ra.....	16
Alcoholic Extract of Colocynth...	146	Amyg'dāla Dul'cis.....	16
Alcoholic Extract of Digitalis....	149	Amylic Alcohol.....	13
Alcoholic Extract of Hemlock....	148	Amȳlum	16
Alcoholic Extract of Henbane....	153	Angel'ica.....	56
Alcoholic Extract of Ignatia.....	153	Angŭstū'ra.	16
Alcoholic Extract of Nux Vomica	165	Animal Charcoal.....	22
Alcoholic Extract of Rhubarb....	158	Anise	16
Alcoholic Extract of Seneka.....	159	Anī'sum	16
Alcoholic Extract of Stramonium	160	Anthēmis.....	16
Alcoholic Extract of Valerian....	161	Antīmō'nii et Pōtas'sæ Tartras...	92
Al'ëtris.....	56	Antīmō'nii Ox'idum.....	93
Al'lium.....	14	Antīmō'nii Oxȳsulphūrē'tum.....	95
ALOE	89	Antīmō'nii Sulphūrē'tum.....	17
Al'ōē Barbādēn'sis	14	<i>Antīmō'nii Sulphūrē'tum Præcipi-</i> <i>tā'tum</i>	96
Al'ōē Cāpen'sis	14	ANTIMONIUM.....	92
Al'ōē Pūrīficā'ta	89	Antīmō'nium Sulphūrā'tum.	96
Al'ōē Soc'ōtrī'na.....	15	Aperient Effervescing Powders...	272
Althæa.....	15	Apoç'ŷnum Androsēmifō'lium...	56
<i>Althææ Rē'dix</i>	15	Apoç'ŷnum Cannab'inum.....	56
Alum.....	15	Aq'ua	17
Alum-root	59	Aq'ua Acīdi Carbō'nīci.....	97
Alū'men	15	Aq'ua Ammō'niæ.....	97
Alū'men Exsiccā'tum	90	Aq'ua Ammō'niæ For'tior	17
Alū'minæ et Ammō'niæ Sulphas	15	Aq'ua Amyg'dālæ Amā'rae.....	99
Alū'minæ Sulphas.....	90	Aq'ua Auran'tii Flō'rum.....	99
ALUMINIUM	90	Aq'ua Cam'phōræ.....	99
American Centaury	62	Aq'ua Chlōrin'ii.....	100
American Columbo.....	58	Aq'ua Cinnāmō'mi	101
American Hellebore.....	55	Aq'ua Creāsō'ti.....	101
American Pennyroyal.....	31	Aq'ua Destillā'ta	101
American Senna.....	23	Aq'ua Fœniç'ili.....	102
AMMONIA	91	Aq'ua Menthæ Pipēri'tæ.....	102
Ammonia-alum.....	15	Aq'ua Menthæ Vir'idis.....	103

	PAGE		PAGE
Aq'ua Rō'sæ	103	Bal'sāmum Perūviā'num.....	19
Aquæ.....	97	Bal'sāmum Tolūtā'num.....	19
Aralia Bark	56	Barbadoes Aloes.....	14
Arā'lia Nudicaul'is.....	56	Barberry.....	57
Arā'lia Spi'nōsa.....	56	Bā'rīi Chlō'rīdum.....	110
Argenti Cyan'īdum	104	BARIUM	110
Argenti Cyānūrē'tum.....	104	Bark of Pomegranate Root.....	31
Argenti Nī'tras.....	105	Bark of Sassafras Root.....	48
Argenti Nī'tras Fū'sa	106	Barley.....	31
Argenti Nī'tras Fū'sus.....	106	Barȳ'tæ Cārbō'nas	19
Argenti Ox'īdum.....	106	Basilicon Ointment.....	122
ARGENTUM.....	104	Bay-rum.....	52
Argentum.....	17	Bean of Saint Ignatius.....	32
Ar'nīca.....	18	Bebeeru Bark	38
Aromatic Confection	128	Bellādon'na	19
Aromatic Powder	273	Belladonna Leaf	19
Aromatic Spirit of Ammonia	290	Belladonna Root	19
Aromatic Sulphuric Acid.....	78	Bellādon'næ Fo'lium	19
Aromatic Syrup of Rhubarb.....	307	Bellādon'næ Rā'dix.....	19
Arrow-root.....	36	Benne Leaf.....	62
Arsenic.....	18	Benne Oil	60
Arsen'īci Iō'dīdum.....	107	Benzoic Acid.....	69
ARSENICUM.....	107	Benzoin.....	19
Arsen'īcum	18	Benzō'īnum.....	19
Arsenious Acid.....	10	Ber'bēris.....	57
Arum.....	56	Bicarbonate of Potassa.....	262
As'ārum.....	56	Bicarbonate of Soda.....	282
Asclē'pias	56	Bichromate of Potassa.....	43
Asclē'pias Tūbērō'sa.....	56	Bismuth.....	19
Assafetida.....	18	Bismū'thi Subcarbō'nas.....	111
Assāfetīda.....	18	Bismū'thi Subnī'tras	113
ATROPIA	108	BISMUTHUM.....	111
Atro'pia	108	Bismū'thum.....	19
Atro'piæ Sulphas.....	110	Bitartrate of Potassa.....	44
Auran'tii Amā'ri Cortex.....	18	Bitter Almond.....	16
Auran'tii Dul'cis Cortex.....	18	Bitter Almond Water.....	99
Auran'tii Flō'res.....	18	Bitter Orange Peel.....	18
Avē'næ Farī'na.....	18	Bitter Polygala.....	61
Azed'ārach.....	57	Bittersweet.....	28
		Black Alder.....	61
		Black Drop	67
		Black Hellebore.....	31
		Black Mustard	50
Balm.....	60	Black Oxide of Manganese.....	35
Balsam of Fir.....	54	Black Pepper.....	42
Balsam of Peru.....	19	Black Snakeroot	25
Balsam of Tolu.....	19		

B

	PAGE		PAGE
Cerate of Savine.....	123	Cinnamon.....	25
Cerate of Spermaceti.....	120	Cinnamon Water.....	101
Cerate of Subacetate of Lead.....	121	Citrate of Iron.....	181
Cērā'tum Ad'īpis.....	119	Citrate of Iron and Ammonia.....	181
Cērā'tum Cānthar'īdis.....	120	Citrate of Iron and Quinia.....	185
Cērā'tum Cetā'cēi.....	120	Citrate of Potassa.....	265
Cērā'tum Extracti Canthar'īdis..	121	Citric Acid.....	11
Cērā'tum Plumbi Subacētā'tis....	121	Clarified Honey.....	232
Cērā'tum Resī'næ.....	122	Cloves.....	23
Cērā'tum Resī'næ Compos'itum..	122	Coc'cus.....	26
Cērā'tum Sabī'næ.....	123	Cochineal.....	26
Cērā'tum Sapō'nis.....	123	Cod-liver Oil.....	39
Cērā'tum Simplex.....	119	Coffee.....	20
Cērā'tum Zinci Carbōnā'tis.....	123	Col'chici Rā'dix.....	26
Cetā'cēum.....	24	Col'chici Sē'men.....	26
Cetrā'ria.....	24	Colchicum Root.....	26
Cevadilla.....	47	Colchicum Seed.....	26
Chalk.....	27	Collodion.....	125
Chalk Mixture.....	235	Collodion with Cantharides.....	127
Chamomile.....	16	COLLODIUM.....	125
Charcoal.....	22	Collō'dium.....	125
Chēnōpo'dium.....	24	Collō'dium cum Canthar'ide.....	127
Chī'maph'ila.....	24	Colocynth.....	26
Chī'ret'ta.....	24	Cōlōcyn'this.....	26
Chlorate of Potassa.....	44	Colom'ba.....	21
Chloride of Barium.....	110	Columbo.....	21
Chloride of Calcium.....	20	Commercial Chloroform.....	24
Chloride of Iron.....	180	Common Salt.....	51
Chloride of Lime.....	21	Compound Cathartic Pills.....	253
Chloride of Sodium.....	51	Compound Decoction of Sarsa-	
Chloride of Zinc.....	360	parilla.....	134
Chlorinated Lime.....	21	Compound Extract of Colocynth..	147
Chlorine Water.....	100	Compound Fluid Extract of Sar-	
Chlōrōform'um.....	87	saparilla.....	173
Chlōrōform'um Pūrificā'tum.....	87	Compound Infusion of Catechu..	205
Chlōrōform'um Vēnā'le.....	24	Compound Infusion of Flaxseed..	209
Chondrus.....	24	Compound Infusion of Gentian... 207	
Chromic Acid.....	10	Compound Infusion of Rose..... 211	
Cim'īqif'ūga.....	25	Compound Mixture of Iron..... 235	
Cinchō'na Flā'va.....	25	Compound Mixture of Liquorice.. 236	
Cinchō'na Pal'lida.....	25	Compound Ointment of Iodine... 349	
Cinchō'na Ru'bra.....	25	Compound Pills of Antimony..... 252	
CINCHONIA.....	124	Compound Pills of Galbanum..... 257	
Cinchō'niæ Sulphas.....	124	Compound Pills of Iron..... 255	
Cinnabar.....	200	Compound Pills of Rhubarb..... 259	
Cinnāmō'mum.....	25	Compound Pills of Soap..... 259	

	PAGE		PAGE
Dēcoc'tum Uvæ Ursi.....	135	Emplas'trum Hydrarg'ÿri.....	139
Delphī'nium.....	58	Emplas'trum Opii.....	139
Deodorized Tincture of Opium....	333	Emplas'trum Pī'cis Burgun'dicæ	140
Dīgītā'lis.....	28	Emplas'trum Pī'cis Canāden'sis..	140
Diluted Acetic Acid.....	69	Emplas'trum Pī'cis eum Can-	
Diluted Alcohol.....	14	thar'ide.....	140
Diluted Hydriodic Acid.....	71	Emplas'trum Plum'bi.....	141
Diluted Hydrocyanic Acid.....	73	Emplas'trum Resi'næ.....	141
Diluted Muriatic Acid.....	74	Emplas'trum Sapō'nis.....	141
Diluted Nitric Acid.....	75	Ergot.....	28
Diluted Nitromuriatic Acid.....	75	Ergō'ta.....	28
Diluted Phosphoric Acid.....	76	Erīg'ëron.....	28
Diluted Solution of Subacetate of		Erīg'ëron Canāden'se.....	28
Lead.....	226	Essence of Lemon.....	293
Diluted Sulphuric Acid.....	78	Essence of Peppermint.....	294
Dīos'pÿros.....	58	Essence of Spearmint.....	294
Distilled Vinegar.....	66	Ether.....	84
Distilled Water.....	101	Ethereal Oil.....	88
Dogs-bane.....	56	Euon'ÿmus.....	58
Dogwood.....	26	Eupātō'rium.....	28
Dover's Powder.....	273	Euphor'bia Corollāta.....	58
Drācon'tium.....	58	Euphor'bia Ipēcaeūan'ha.....	58
Dried Alum.....	90	Extract of Belladonna.....	144
Dried Carbonate of Soda.....	283	Extract of Bittersweet.....	150
Dried Sulphate of Iron.....	192	Extract of Butternut.....	155
Dulcāmā'ra.....	28	Extract of Cinchona.....	145
E		Extract of Dandelion.....	161
Effervescing Powders.....	271	Extract of Gentian.....	151
Egg.....	41	Extract of Hemlock.....	148
Elātē'rium.....	28	Extract of Hemp.....	28
Elder.....	48	Extract of Henbane.....	152
Elecampane.....	59	Extract of Jalap.....	154
Elixir of Vitriol.....	78	Extract of Logwood.....	151
EMPLASTRA.....	135	Extract of May-apple.....	157
Emplas'trum Ammōnī'āci.....	135	Extract of Opium.....	156
Emplas'trum Ammōnī'āci cum		Extract of Quassia.....	158
Hydrarg'ÿro.....	136	Extract of Rhatany.....	155
Emplas'trum Antīmō'nii.....	136	Extract of Stramonium.....	159
Emplas'trum Ar'nīcæ.....	137	EXTRACTA.....	142
Emplas'trum Assāfoetīdæ.....	137	EXTRACTA FLUIDA.....	162
Emplas'trum Bellādon'næ.....	138	Extrac'tum Acōnī'ti Alcōhol'ÿ-	
Emplas'trum Ferri.....	138	cum.....	142
Emplas'trum Gal'bāni Compos'ÿ-		Extrac'tum Ar'nīcæ Alcōhol'icūm	143
tum.....	138	Extrac'tum Bellādon'næ.....	144
		Extrac'tum Bellādon'næ Alcō-	
		hol'icūm.....	144

	PAGE		PAGE
Extrac'tum Bug'hu Flū'idum.....	162	Extrac'tum Krāmē'riæ.....	155
Extrac'tum Can'nābis.....	28	Extrac'tum Lūpūlī'næ Flū'idum	170
Extrac'tum Can'nābis Pūrificā'-		<i>Extrac'tum Nū'cis Vom'icæ</i>	156
tum.....	145	Extrac'tum Nū'cis Vom'icæ Alcō-	
Extrac'tum Cim'īcif'ūgæ Flū'-		hol'icūm.....	156
idum.....	163	Extrac'tum Opii.....	156
Extrac'tum Cinchō'næ.....	145	<i>Extrac'tum Pi'pēris Flū'idum</i>	249
<i>Extrac'tum Cinchō'næ Flā'væ</i>	145	Extrac'tum Po'dōphyl'li.....	157
Extrac'tum Cinchō'næ Flū'idum.	164	Extrac'tum Prū'ni Virgīnīā'næ	
Extrac'tum Col'chīci Acē'ticūm...	146	Flū'idum.....	170
Extrac'tum Col'chīci Radī'cis		Extrac'tum Quassīæ.....	158
Flū'idum.....	164	<i>Extrac'tum Rhē'i</i>	158
Extrac'tum Col'chīci Sem'inis		Extrac'tum Rhē'i Alcōhol'icūm...	158
Flū'idum.....	165	Extrac'tum Rhē'i Flū'idum.....	172
Extrac'tum Cōlōcynth'idis Alcō-		Extrac'tum Sarsāpāril'læ Flū'-	
hol'icūm.....	146	idum.....	173
Extrac'tum Cōlōcynth'idis Com-		<i>Extrac'tum Sarsāpāril'læ Flū'-</i>	
pos'itūm.....	147	idum.....	173
Extrac'tum Conī'i.....	148	Extrac'tum Sarsāpāril'læ Flū'-	
Extrac'tum Conī'i Alcōhol'icūm..	148	idum Compos'itūm.....	173
Extrac'tum Conī'i Flū'idum.....	165	Extrac'tum Sen'ēgæ Alcōhol'i-	
<i>Extrac'tum Cūbē'bæ Flū'idum</i>	248	cūm.....	159
Extrac'tum Dīgītā'lis Alcōhol'i-		Extrac'tum Sennæ Flū'idum.....	174
cūm.....	149	Extrac'tum Serpentā'riæ Flū'-	
Extrac'tum Dulcāmā'ræ.....	150	idum.....	175
Extrac'tum Dulcāmā'ræ Flū'-		Extrac'tum Spīgē'liæ et Sennæ	
idum.....	166	Flū'idum.....	175
Extrac'tum Ergō'tæ Flū'idum....	167	Extrac'tum Spīgē'liæ Flū'idum..	176
Extrac'tum Gēntiā'næ.....	151	Extrac'tum Strāmō'nii.....	159
Extrac'tum Gēntiā'næ Flū'idum.	168	Extrac'tum Strāmō'nii Alcōhol'i-	
Extrac'tum Glyc'ýrrhī'zæ.....	28	cūm.....	160
Extrac'tum Hæmātox'ýli.....	151	<i>Extrac'tum Strāmō'nii Fo'liō'rum</i>	159
<i>Extrac'tum Helleb'ōri</i>	151	Extrac'tum Tarax'āci.....	161
Extrac'tum Helleb'ōri Alcōhol'i-		Extrac'tum Tarax'āci Flū'idum..	177
cūm.....	151	Extrac'tum Uvæ Ursi Flū'idum..	177
Extrac'tum Hyoscý'āmi.....	152	Extrac'tum Valēriā'næ Alcōhol'i-	
Extrac'tum Hyoscý'āmi Alcō-		cūm.....	161
hol'icūm.....	153	Extrac'tum Valēriā'næ Flū'idum	178
Extrac'tum Hyoscý'āmi Flū'-		Extrac'tum Verā'tri Vir'idis Flū'-	
idum.....	168	idum.....	179
Extrac'tum Ignā'tiæ Alcōhol'i-		Extrac'tum Zingib'ēris Flū'idum	179
cūm.....	153		
Extrac'tum Ipēcacūan'hæ Flū'-			
idum.....	169		
Extrac'tum Jalā'pæ.....	154		
Extrac'tum Juglan'dis.....	155		

F

False Sarsaparilla.....	56
Fennel.....	29

	PAGE		PAGE
Fennel Water	102	Fluid Extract of Ginger.....	179
Fermen'tum	29	Fluid Extract of Hemlock	165
Ferri Chlō'rīdum	180	Fluid Extract of Henbane	168
Ferri Cī'tras.....	181	Fluid Extract of Ipecacuanha....	169
Ferri et Ammō'nīæ Cī'tras.....	181	Fluid Extract of Lupulin	170
Ferri et Ammō'nīæ Sulphas.....	182	Fluid Extract of Rhubarb	172
Ferri et Ammō'nīæ Tartras.....	183	Fluid Extract of Sarsaparilla....	173
Ferri et Pōtas'sæ Tartras.....	184	Fluid Extract of Senna.....	174
Ferri et Quī'nīæ Cī'tras	185	Fluid Extract of Serpentaria.....	175
Ferri Ferrocyan'idum.....	186	Fluid Extract of Spigelia.....	176
<i>Ferri Ferrocyanūrē'tum</i>	186	Fluid Extract of Spigelia and Senna.....	175
Ferri Lactas.....	186	Fluid Extract of Uva Ursi.....	177
Ferri Ox'idum Hydrā'tum.....	187	Fluid Extract of Valerian	178
Ferri Phosphas.....	188	Fluid Extract of Wild-cherry Bark	170
<i>Ferri Pulvis</i>	193	Fœnig'ūlum	29
Ferri Pŷ'rōphosphas.....	189	Frāsē'ra	58
Ferri Subcarbō'nas.....	191	Frostwort	59
Ferri Sulphas	191	Fused Nitrate of Silver.....	106
Ferri Sulphas Exsiccā'ta	192	Fusel Oil	13
Ferri Sulphūrē'tum.....	29		
Ferrocyanide of Iron	186		
Ferrocyanide of Potassium.....	45		
FERRUM	180	G	
Ferrum	29	Gal'bānum.....	29
Ferrum Rēdac'tum.....	193	Galla	29
Fever-root	63	Gallic Acid	70
Fī'cus	29	Gamboge	30
Fig.....	29	Gambō'gia.....	30
Fī'lix Mas	29	Garlic.....	14
FINENESS OF POWDERS.....	7	Gaulthē'ria	30
Flaxseed.....	34	Ġelsem'ium.....	58
Flaxseed Meal.....	34	Gentian.....	30
Flaxseed Oil	39	Ġentiā'na	30
Fleabane.....	28	Ġentiā'na Ġātēs bæi.....	59
Florentine Orris.....	59	Ġērā'nium.....	30
Fluid Extract of American Helle- bore	179	German Chamomile.....	37
Fluid Extract of Bittersweet	166	Ġē'um.....	59
Fluid Extract of Buchu.....	162	Ġillō'nia	30
Fluid Extract of Cimicifuga.....	163	Ginger.....	55
Fluid Extract of Cinchona.....	164	Ginseng	60
Fluid Extract of Colchicum Root	164	Glacial Phosphoric Acid.....	12
Fluid Extract of Colchicum Seed	165	Glycerin.....	30
Fluid Extract of Dandelion	177	Glyç'ērīna	30
Fluid Extract of Ergot.....	167	Glyç'ÿrrhi'za.....	30
Fluid Extract of Gentian	168	Golden-rod.....	62

	PAGE		PAGE
Goldthread.....	26	Hydrarg'ÿri Sulphas Flä'va.....	200
Gossyp'ii Rā'dix.....	59	<i>Hydrarg'ÿri Sulphas Flä'vus</i>	200
Gossyp'ium.....	30	Hydrarg'ÿri Sulphūrē'tum Ru'-	
Goulard's Cerate.....	121	brum.....	200
Grānā'ti Fructūs Cortex.....	31	HYDRARGYRUM.....	195
Grānā'ti Rādī'cis Cortex.....	31	Hydrarg'ÿrum.....	32
Green Iodide of Mercury.....	198	Hydrarg'ÿrum Ammōniā'tum....	201
Guaiac.....	31	Hydrarg'ÿrum cum Crē'tā.....	202
Guai'āci Lignum.....	31	Hydras'tis.....	59
Guai'āci Resī'na.....	31	Hydrated Oxide of Iron.....	187
Guaiacum Wood.....	31	<i>Hyoscy'āmi Fo'lia</i>	32
Gum Arabic.....	9	<i>Hyoscy'āmi Fo'lium</i>	32
Gutta-percha.....	31	<i>Hyoscy'āmi Sē'men</i>	32

H

Hæmātox'ÿlon.....	31
Hardhack.....	62
Hædō's'ma.....	31
Hēlian'thēmum.....	59
Helleb'ōrus.....	31
Hemlock.....	26
Hemlock Pitch.....	42
Hemlock Pitch Plaster.....	140
Henbane Leaf.....	32
Henbane Seed.....	32
Hēpat'ica.....	59
Heu'chēra.....	59
Hoffmann's Anodyne.....	287
Honey.....	37
Honey of Borate of Soda.....	233
Honey of Rose.....	232
Hops.....	32
Hor'dēum.....	31
Horehound.....	36
Horsemint.....	37
Hū'mūlus.....	32
Hydrarg'ÿri Chlō'rīdum Corrō-	
sī'vum.....	195
Hydrarg'ÿri Chlō'rīdum Mī'te....	195
Hydrarg'ÿri Cÿan'īdum.....	196
<i>Hydrarg'ÿri Cÿanūrē'tum</i>	196
<i>Hydrarg'ÿri Iō'dīdum</i>	198
Hydrarg'ÿri Iō'dīdum Ru'brum..	197
Hydrarg'ÿri Iō'dīdum Vir'īde....	198
Hydrarg'ÿri Ox'īdum Ru'brum... 199	

I

Iceland Moss.....	24
Içhth'ÿcol'la.....	32
Ignā'tia.....	32
Impure Carbonate of Potassa....	44
Indian Hemp.....	56
Indian Turnip.....	56
INFUSA.....	202
Infusion of Angustura.....	202
Infusion of Buchu.....	203
Infusion of Capsicum.....	204
Infusion of Cascarella... ..	204
Infusion of Chamomile.....	203
Infusion of Cloves.....	204
Infusion of Columbo.....	203
Infusion of Dandelion.....	213
Infusion of Digitalis.....	206
Infusion of Ginger.....	214
Infusion of Hops.....	208
Infusion of Juniper.....	208
Infusion of Pareira Brava.....	209
Infusion of Quassia.....	210
Infusion of Red Cinchona.....	206
Infusion of Rhatany.....	208
Infusion of Rhubarb.....	210
Infusion of Sage.....	211
Infusion of Senna.....	211
Infusion of Serpentaria.....	212
Infusion of Spigelia.....	212
Infusion of Tar.....	209
Infusion of Thoroughwort.....	207

	PAGE		PAGE
Infusion of Tobacco.....	213	Ipecacūan'ha.....	33
Infusion of Valerian.....	213	Ipecacuanha Spurge.....	58
Infusion of Wild-cherry Bark.....	210	Iris Flōrentī'na.....	59
Infusion of Yellow Cinchona.....	205	Iris Versig'ōlor.....	59
Infū'sum Angustā'ræ.....	202	Irish Moss.....	24
Infū'sum Anthem'īdis.....	203	Iron.....	29
Infū'sum Bug'hu.....	203	Isinglass.....	32
Infū'sum Cālum'bæ.....	203		
Infū'sum Cap'sīci.....	204	J	
Infū'sum Carŷōphyl'li.....	204	Jalap.....	33
Infū'sum Cascāril'læ.....	204	Jalā'pa.....	33
Infū'sum Catēghu Compos'itum..	205	Juglans.....	33
<i>Infū'sum Cinchō'næ Compos'itum..</i>	206	Juniper.....	33
Infū'sum Cinchō'næ Flā'væ.....	205	Jūnip'ērus.....	33
Infū'sum Cinchō'næ Ru'bræ.....	206	Jūnip'ērus Virgīniā'na.....	60
<i>Infū'sum Cōlom'bæ.....</i>	203		
Infū'sum Dīgītā'lis.....	206	K	
Infū'sum Eupātō'rii.....	207	Kameela.....	61
Infū'sum Gentiā'næ Compos'itum	207	Kermes Mineral.....	95
Infū'sum Hū'mūli.....	208	Kī'no.....	33
Infū'sum Jūnip'ēri.....	208	Koosso.....	57
Infū'sum Krāmē'riæ.....	208	Krāmē'ria.....	33
Infū'sum Lī'ni Compos'itum.....	209		
Infū'sum Parei'ræ.....	209	L	
Infū'sum Pi'cis Liq'uīdæ.....	209	Lactate of Iron.....	186
Infū'sum Prū'ni Virgīniā'næ....	210	Lactic Acid.....	11
Infū'sum Quas'siæ.....	210	Lactucā'rium.....	33
Infū'sum Rhē'i.....	210	Lappa.....	60
Infū'sum Ro'sæ Compos'itum.....	211	Lard.....	13
Infū'sum Sal'viæ.....	211	Large-flowering Spurge.....	58
<i>Infū'sum Sas'sāfras Mēdul'læ....</i>	241	Larkspur.....	58
Infū'sum Sennæ.....	211	Laudanum.....	332
Infū'sum Serpentā'riæ.....	212	Lavan'dūla.....	33
Infū'sum Spīgē'liæ.....	212	Lavender.....	33
Infū'sum Tābā'ci.....	213	Lead-water.....	226
Infū'sum Tārax'āci.....	213	Lemon Juice.....	34
<i>Infū'sum Ulmī.....</i>	241	Lemon Peel.....	34
Infū'sum Valēriā'næ.....	213	Leptan'dra.....	34
Infū'sum Zingib'ēris.....	214	Levant Wormseed.....	48
Inūla.....	59	Lime.....	21
Iodide of Arsenic.....	107	Lime Liniment.....	214
Iodide of Lead.....	260	Lime-water.....	218
Iodide of Potassium.....	269	Līmō'nis Cortex.....	34
Iodide of Sulphur.....	298		
Iodine.....	32		
Iōdin'ium.....	32		

	PAGE
Mentha Vir'idis	37
Mercury	32
Mercury with Chalk.....	202
Mezereon	37
Mezē'rēum.....	37
Mild Chloride of Mercury	195
Mistū'ra Ammōnī'āci.....	233
Mistū'ra Amyg'dālæ.....	233
Mistū'ra Assāfētīdæ	234
Mistū'ra Chlōrōform'i	234
Mistū'ra Crē'tæ	235
Mistū'ra Ferri Compos'ita	235
Mistū'ra Glyc'ýrrhī'zæ Com- pos'ita.....	236
Mistū'ra Pōtas'sæ Cītrā'tis.....	236
MISTURÆ	233
Mixture of Almond.....	233
Mixture of Ammoniac.....	233
Mixture of Assafetida.....	234
Mixture of Chloroform.....	234
Mixture of Citrate of Potassa	236
Molasses	53
Monar'da.....	37
Monsel's Solution.....	220
MORPHIA.....	237
Mor'phia	237
Mor'phiæ Acē'tas.....	238
Mor'phiæ Mu'rias	239
Mor'phiæ Sulphas	240
Moschus	37
Mucilage of Gum Arabic.....	240
Mucilage of Sassafras	241
Mucilage of Slippery-elm Bark...	241
Mucilage of Tragacanth.....	241
MUCILAGINES.....	240
Mucilā'go Acē'ciæ.....	240
Mucilā'go Sas'sāfras.....	241
Mucilā'go Tragācan'thæ	241
Mucilā'go Ulmī.....	241
Mucī'na.....	60
Muriate of Ammonia.....	15
Muriate of Morphia.....	239
Muriatic Acid.....	11
Musk	37
Mýris'tica.....	37

	PAGE
Myrrh	37
Myr'ra.....	37

N

Neats-foot Oil.....	39
Nectan'dra	38
Neutral Mixture.....	236
Nitrate of Lead.....	43
Nitrate of Potassa	45
Nitrate of Silver	105
Nitric Acid.....	12
Nitromuriatic Acid	75
Nutgall.....	29
Nutmeg.....	37
Nux Vom'ica.....	38

O

Oatmeal	18
Oil of Amber	40
Oil of Anise.....	242
Oil of Bergamot.....	38
Oil of Bitter Almond	38
Oil of Cajeput.....	39
Oil of Camphor.....	39
Oil of Canada Fleabane	244
Oil of Caraway	243
Oil of Ceylon Cinnamon	39
Oil of Cinnamon	39
Oil of Cloves	243
Oil of Copaiba	243
Oil of Cubeb.....	244
Oil of Fennel.....	244
Oil of Gaultheria	244
Oil of Hedeoma	244
Oil of Horsemint.....	245
Oil of Juniper.....	245
Oil of Lavender.....	245
Oil of Lemon	39
Oil of Nutmeg	40
Oil of Peppermint.....	245
Oil of Pimento.....	246
Oil of Rose.....	40
Oil of Rosemary.....	246

	PAGE		PAGE
Oil of Sassafras.....	246	<i>Oleum Amyg'dālæ</i>	38
Oil of Savine.....	246	<i>Oleum Amyg'dālæ Amā'rae</i>	38
Oil of Spearmint.....	245	<i>Oleum Amyg'dālæ Dul'cis</i>	38
Oil of Sweet Almond.....	38	<i>Oleum Anī'si</i>	242
Oil of Theobroma.....	40	<i>Oleum Bergā'mii</i>	38
Oil of Thyme.....	41	<i>Oleum Bū'bulum</i>	39
Oil of Tobacco.....	247	<i>Oleum Cajūpū'ti</i>	39
Oil of Turpentine.....	40	<i>Oleum Cam'phoræ</i>	39
Oil of Valerian.....	247	<i>Oleum Car'i</i>	243
Oil of Wormseed.....	243	<i>Oleum Carÿōphyl'li</i>	243
Ointment of Ammoniated Mer-		<i>Oleum Chēnōpo'dii</i>	243
cury.....	348	<i>Oleum Cinnāmō'mi</i>	39
Ointment of Antimony.....	345	<i>Oleum Copai'bæ</i>	243
Ointment of Belladonna.....	346	<i>Oleum Cūbē'bæ</i>	244
Ointment of Benzoin.....	346	<i>Oleum Erīgēron'tis Canāden'sis</i> ..	244
Ointment of Carbonate of Lead..	350	<i>Oleum Fœniç'ūli</i>	244
Ointment of Creasote.....	347	<i>Oleum Gaulthē'riæ</i>	244
Ointment of Iodide of Potassium	350	<i>Oleum Hēdēō'mæ</i>	244
Ointment of Iodide of Sulphur..	351	<i>Oleum Jūnip'ēri</i>	245
Ointment of Iodine.....	349	<i>Oleum Lavan'dulæ</i>	245
Ointment of Lard.....	345	<i>Oleum Limō'nis</i>	39
Ointment of Mercury.....	347	<i>Oleum Li'ni</i>	39
Ointment of Nitrate of Mercury..	348	<i>Oleum Menthæ Pi'pēri'tæ</i>	245
Ointment of Nutgall.....	347	<i>Oleum Menthæ Vir'īdis</i>	245
Ointment of Oxide of Zinc.....	352	<i>Oleum Monar'dæ</i>	245
Ointment of Red Oxide of Mer-		<i>Oleum Morrhūæ</i>	39
cury.....	349	<i>Oleum Mÿris'ticæ</i>	40
Ointment of Rose Water.....	346	<i>Oleum Oli'væ</i>	40
Ointment of Stramonium.....	351	<i>Oleum Pimen'tæ</i>	246
Ointment of Sulphur.....	351	<i>Oleum Riç'īni</i>	40
Ointment of Tannic Acid.....	344	<i>Oleum Ro'sæ</i>	40
Ointment of Tobacco.....	352	<i>Oleum Rosmāri'ni</i>	246
Ointment of Veratria.....	352	<i>Oleum Sabi'næ</i>	246
OLEA DESTILLATA.....	242	<i>Oleum Sas'sāfras</i>	246
Oleoresin of Black Pepper.....	249	<i>Oleum Sē'sāmi</i>	60
Oleoresin of Capsicum.....	248	<i>Oleum Sug'eini</i>	40
Oleoresin of Cubeb.....	248	<i>Oleum Sug'eini Rectificā'tum</i>	246
Oleoresin of Ginger.....	250	<i>Oleum Tābā'ci</i>	247
Oleoresin of Lupulin.....	249	<i>Oleum Tērēbinth'inæ</i>	40
Oleorēsī'na Cap'sici.....	248	<i>Oleum Theōbrō'mæ</i>	40
Oleorēsī'na Cūbē'bæ.....	248	<i>Oleum Thy'mi</i>	41
Oleorēsī'na Lūpūli'næ.....	249	<i>Oleum Tig'lii</i>	41
Oleorēsī'na Pi'pēris.....	249	<i>Oleum Valēriā'næ</i>	247
Oleorēsī'na Zingib'ēris.....	250	<i>Olive Oil</i>	40
OLEORESINÆ.....	248	<i>Opium</i>	41
<i>Oleum Æthē'rēum</i>	88	<i>Orange Flowers</i>	18

	PAGE
Orange Flower Water	99
Os	41
O'vum.....	41
Oxide of Antimony.....	93
Oxide of Lead.....	43
Oxide of Silver	106
Oxide of Zinc	361
Oxysulphuret of Antimony.....	95
Oyster-shell	54

P

Pale Cinchona.....	25
Pale Rose	46
Pa'nax.....	60
Păpă'ver.....	41
Parei'ra.....	41
Pareira Brava.....	41
Parsley Root.....	60
Pellitory	61
Pe'po	41
Peppermint	37
Peppermint Water.....	102
PERCOLATION.....	3
Permanganate of Potassa.....	45
Persimmon	58
Pētrōsēl'num	60
Phosphate of Iron.....	188
Phosphate of Soda.....	283
Phos'phorus.....	41
Phy'tōlaccæ Bac'ca	61
Phy'tōlaccæ Bac'cæ	61
Phy'tōlaccæ Rā'dix.....	61
Pills of Aloes.....	251
Pills of Aloes and Assafetida.....	251
Pills of Aloes and Mastic.....	251
Pills of Aloes and Myrrh.....	252
Pills of Assafetida.....	253
Pills of Carbonate of Iron.....	254
Pills of Copaiba	253
Pills of Iodide of Iron.....	255
Pills of Mercury.....	257
Pills of Opium.....	258
Pills of Rhubarb.....	258
Pills of Sulphate of Quinia.....	258
PILULÆ.....	251

	PAGE
Pil'ulæ Al'ðēs.....	251
Pil'ulæ Al'ðēs et Assāfoetidæ.....	251
Pil'ulæ Al'ðēs et Mas'tichēs	251
Pil'ulæ Al'ðēs et Myr'rhæ.....	252
Pil'ulæ Antīmō'nii Compos'itæ...	252
Pil'ulæ Assāfoetidæ	253
Pil'ulæ Cathart'icæ Compos'itæ..	253
Pil'ulæ Copai'bæ	253
Pil'ulæ Ferri Carbōnā'tis.....	254
Pil'ulæ Ferri Compos'itæ.....	255
Pil'ulæ Ferri Iō'dīdi.....	255
Pil'ulæ Gal'bāni Compos'itæ.....	257
Pil'ulæ Hydrarg'ŷri.....	257
Pil'ulæ Opii.....	258
Pil'ulæ Qui'niæ Sulphā'tis.....	258
Pil'ulæ Rhē'i.....	258
Pil'ulæ Rhē'i Compos'itæ.....	259
Pil'ulæ Sapō'nis Compos'itæ.....	259
Pil'ulæ Scil'læ Compos'itæ.....	259
Pi'menta.....	42
Pimento.....	42
Pinkroot.....	51
Pi'per	42
Pipsissewa	24
Pix Burgun'dica.....	42
Pix Canāden'sis.....	42
Pix Liq'uīda	42
Plaster of Ammoniac.....	135
Plaster of Ammoniac with Mer- cury.....	136
Plaster of Antimony	136
Plaster of Arnica	137
Plaster of Assafetida.....	137
Plaster of Belladonna	138
Plaster of Burgundy Pitch.....	140
Plaster of Canada Pitch.....	140
Plaster of Iron.....	138
Plaster of Lead.....	141
Plaster of Mercury	139
Plaster of Opium	139
Plaster of Pitch with Cantharides	140
Plum'bi Acē'tas.....	42
Plum'bi Carbō'nas.....	43
Plum'bi Iō'dīdum	260
Plum'bi Ni'tras.....	43
Plum'bi Ox'idum	43

	PAGE		PAGE
<i>Plum'bi Ox'idum Semivit'reum</i>	43	Prepared Chalk.....	118
PLUMBUM	260	Prepared Oyster-shell.....	118
Plummer's Pills.....	252	Prickly Ash.....	63
Po'dōphyl'lum	43	PRIMARY LIST.....	9
Poison-oak	63	Prī'nos.....	61
Poke Berry.....	61	Prune.....	46
Poke Root	61	Prū'num	46
Polyg'āla Rubel'la	61	Prū'nus Virgīniā'næ.....	46
Pomegranate Rind.....	31	PULVERES.....	271
Poppy.....	41	Pulvères Effervescen'tes.....	271
Port Wine	55	Pulvères Effervescen'tes Apēri- en'tes.....	272
Pōtas'sa	261	Pulvis Al'ōēs et Canel'læ.....	272
Pōtas'sa cum Calce	261	Pulvis Arōmat'icus.....	273
Potassa with Lime.....	261	Pulvis Ipecacūan'hæ Compos'itus	273
Pōtas'sæ Acē'tas.....	261	<i>Pulvis Ipecacūan'hæ et Opii</i>	273
Pōtas'sæ Bīcarbō'nas.....	262	Pulvis Jalā'pæ Compos'itus.....	274
Pōtas'sæ Bīchrō'mas.....	43	Pulvis Rhē'i Compos'itus	274
Pōtas'sæ Bītar'tras.....	44	Pumpkin Seed.....	41
Pōtas'sæ Carbō'nas.....	263	Pure Carbonate of Potassa.....	264
Pōtas'sæ Carbō'nas Impū'ra.....	44	Pure Prussian Blue.....	186
<i>Pōtas'sæ Carbō'nas Impū'rus</i>	44	Purging Cassia.....	23
Pōtas'sæ Carbō'nas Pū'ra.....	264	Purified Aloes	89
<i>Pōtas'sæ Carbō'nas Pū'rus</i>	264	Purified Animal Charcoal.....	119
Pōtas'sæ Chlō'ras.....	44	Purified Chloroform.....	87
Pōtas'sæ Cī'tras.....	265	Purified Extract of Hemp.....	145
Pōtas'sæ et Sō'dæ Tartras.....	265	Pÿrēth'rum	61
Pōtas'sæ Nī'tras.....	45	Pyrophosphate of Iron.....	189
Pōtas'sæ Perman'gānas	45		
Pōtas'sæ Sulphas.....	45		
Pōtas'sæ Tartras.....	266		
Pōtas'sii Brō'mīdum.....	267		
Pōtas'sii Cŷan'īdum.....	268		
<i>Pōtas'sii Cŷanūrē'tum</i>	268		
Pōtas'sii Ferrocŷan'īdum	45		
<i>Pōtas'sii Ferrocŷanūrē'tum</i>	45		
Pōtas'sii Iō'dīdum	269		
Pōtas'sii Sulphūrē'tum.....	271		
POTASSIUM	261		
Powder of Aloes and Canella.....	272		
Precipitated Carbonate of Iron... 191			
Precipitated Carbonate of Lime.. 116			
Precipitated Carbonate of Zinc... 360			
Precipitated Phosphate of Lime.. 117			
Precipitated Sulphur.....	298		
PRELIMINARY NOTICES.....	1		
PREPARATIONS	65		
		Q	
		Quas'sia	46
		Quer'cus Al'ba	46
		Quer'cus Tinctō'ria	46
		Quince Seed	58
		QUINIA.....	274
		Qui'nīæ Sulphas.....	274
		Qui'nīæ Valēriā'nas	277
		R	
		Raisins.....	54
		Rānun'cūlus	61
		Rectified Oil of Amber.....	246
		Red Cedar	60
		Red Cinchona.....	25

	PAGE		PAGE
Red Iodide of Mercury.....	197	Sā'go	47
Red Oxide of Mercury.....	199	Sal'ix	62
Red Precipitate.....	199	Sal'via	47
Red Rose	46	Sambū'cus	48
Red Saunders.....	48	Sanguinā'ria.....	48
Red Sulphuret of Mercury.....	200	San'tālum.....	48
Reduced Iron.....	193	Santon'ica.....	48
Resin.....	46	Santonin	280
Resin Cerate	122	SANTONINUM.....	280
Resin of Jalap.....	278	Santōnī'num	280
Resin of May-apple.....	279	Sap'o	48
Resin of Scammony.....	279	Sarsāpārīl'la	48
Resin Plaster.....	141	Sas'sāfras Mēdul'la	48
Rēsī'na	46	Sassafras Pith.....	48
Rēsī'na Jalā'pæ.....	278	Sas'sāfras Rādī'cis Cortex.....	48
Rēsī'na Po'dōphyl'li.....	279	SATURATION.....	3
Rēsī'na Scammō'nii.....	279	Savine.....	47
RESINÆ.....	278	Scammō'nium	49
Rochelle Salt.....	265	Scammony	49
Rhatany	33	Scilla.....	49
Rhē'um.....	46	Scōpā'rius	49
Rhubarb.....	46	Scullcap.....	62
Rhus Glab'rum.....	61	Scūtēllā'ria	62
Rō'sa Centifo'lia	46	SECONDARY LIST.....	56
Rō'sa Gal'lica	46	Seidlitz Powders	272
Rosemary	47	Sen'ēga.....	49
Rose Water.....	103	Seneka	49
Rōsmarī'nus	47	Sen'na	49
Rottlē'ra.....	61	Serpentā'ria.....	49
Round-leaved Dogwood	57	Sēsāmi Fo'lia.....	62
Ru'bia.....	61	Sēsāmi Fo'lium.....	62
Rū'bus	47	Sē'vum	49
Rue.....	62	Sherry Wine.....	55
Ru'mex	61	Silver	17
Rū'ta.....	62	Sīmārū'ba	62
		Sīnā'pis Al'ba.....	50
		Sīnā'pis Nī'gra.....	50
		Slippery-elm Bark	54
		Soap.....	48
		Soap Cerate.....	123
		Soap Liniment.....	215
		Soap Plaster	141
		Socotrine Aloes.....	15
		Soda Powders.....	271
		Sō'dæ Acē'tas.....	50
		Sō'dæ Bicarbō'nas	282

S

Sābādīl'la.....	47
Sābbā'tia.....	62
Sabī'na	47
Sac'chārum	47
Sac'chārum Lac'tis	47
Safflower.....	57
Saffron	27
Sage.....	47

	PAGE		PAGE
Sō'dæ Bō'ras.....	50	Spirit of Lemon	293
Sō'dæ Carbō'nas	50	Spirit of Mindererus	216
Sō'dæ Carbō'nas Exsiccā'ta.....	283	Spirit of Myrcia.....	52
Sō'dæ Carbō'nas Exsiccā'tus.....	283	Spirit of Nitrous Ether.....	287
Sō'dæ et Pōtas'sæ Tartras	265	Spirit of Nutmeg	295
Sō'dæ Phosphas.....	283	Spirit of Peppermint.....	294
Sō'dæ Sulphas.....	50	Spirit of Spearmint	294
Sō'dæ Sulphis	51	SPIRITUS	287
Sō'dæ Valēriā'nas	285	Spī'rītus Æthēris Compos'ītus...	287
Sō'dii Chlō'rīdum.....	51	Spī'rītus Æthēris Nī'trīci.....	287
SODIUM.....	282	Spī'rītus Æthēris Nitrō'si.....	287
Sōlīdā'go.....	62	Spī'rītus Ammō'nīæ	289
Solution of Acetate of Ammonia..	216	Spī'rītus Ammō'nīæ Arōmat'īcus	290
Solution of Ammonia.....	97	Spī'rītus Anī'si.....	291
Solution of Arsenite of Potassa...	228	Spī'rītus Cam'phōræ.....	291
Solution of Chloride of Barium...	217	Spī'rītus Chlō'rōform'i.....	291
Solution of Chloride of Calcium...	217	Spī'rītus Cinnāmō'mi	291
Solution of Chlorinated Soda.....	230	Spī'rītus Frūmen'ti.....	51
Solution of Citrate of Iron	218	Spī'rītus Jūnip'ēri Compos'ītus...	292
Solution of Citrate of Magnesia...	224	Spī'rītus Lavan'dūlæ.....	292
Solution of Citrate of Potassa....	228	Spī'rītus Lavan'dūlæ Compos'ī-	
Solution of Gutta-percha	223	tus	292
Solution of Iodide of Arsenic and		Spī'rītus Līmō'nis.....	293
Mercury	216	Spī'rītus Menthæ Pi'pēri'tæ....	294
Solution of Lime	218	Spī'rītus Menthæ Vir'idis.....	294
Solution of Nitrate of Iron.....	219	Spī'rītus Myr'ciæ.....	52
Solution of Nitrate of Mercury...	223	Spī'rītus Mýris'ticæ.....	295
Solution of Persulphate of Iron...	220	Spī'rītus Vī'ni Gal'līci	52
Solution of Potassa.....	226	Squill	49
Solution of Soda	229	Starch.....	16
Solution of Subacetate of Lead...	225	Star Grass	56
Solution of Subsulphate of Iron..	220	Stat'īcē	52
Solution of Sulphate of Morphia	225	Stilling'ia.....	52
Solution of Tersulphate of Iron...	222	STOPPAGE OF BOTTLES.....	3
Spearmint.....	37	Storax.....	52
Spearmint Water.....	103	Stramō'nīi Fo'lia	52
SPECIFIC GRAVITY	3	Stramō'nīi Fo'lium.....	52
Spermaceti.....	24	Stramō'nīi Sē'men.....	52
Spīgē'lia.....	51	Stramonium Leaf.....	52
Spiræa	62	Stramonium Seed.....	52
Spirit of Ammonia.....	289	Stronger Alcohol.....	14
Spirit of Anise.....	291	Stronger Ether	86
Spirit of Camphor	291	Stronger Water of Ammonia.....	17
Spirit of Chloroform.....	291	STRYCHNIA	295
Spirit of Cinnamon.....	291	Strych'nīa	295
Spirit of Lavender.....	292	Strych'nīæ Sulphas	297

	PAGE		PAGE
Sty'rax.....	52	Syrup.....	299
Subacetate of Copper.....	27	Syrup of Almond.....	301
Subcarbonate of Bismuth.....	111	Syrup of Blackberry Root.....	309
Subcarbonate of Iron.....	191	Syrup of Citric Acid.....	300
Sublimed Sulphur.....	53	Syrup of Garlic.....	301
Subnitrate of Bismuth.....	113	Syrup of Ginger.....	313
Suet.....	49	Syrup of Gum Arabic.....	300
Sugar.....	47	Syrup of Iodide of Iron.....	303
Sugar of Lead.....	42	Syrup of Ipecacuanha.....	304
Sugar of Milk.....	47	Syrup of Lactucarium.....	306
Sulphate of Alumina.....	90	Syrup of Lemon.....	306
Sulphate of Alumina and Am- monia.....	15	Syrup of Orange Flowers.....	303
Sulphate of Ammonia.....	16	Syrup of Orange Peel.....	302
Sulphate of Atropia.....	110	Syrup of Red Rose.....	308
Sulphate of Cadmium.....	115	Syrup of Rhatany.....	305
Sulphate of Cinchonia.....	124	Syrup of Rhubarb.....	307
Sulphate of Copper.....	27	Syrup of Seneka.....	312
Sulphate of Iron.....	191	Syrup of Squill.....	311
Sulphate of Iron and Ammonia..	182	Syrup of Tolu.....	313
Sulphate of Magnesia.....	35	Syrup of Wild-cherry Bark.....	307
Sulphate of Manganese.....	36	SYRUP.....	299
Sulphate of Morphia.....	240	Sÿrū'pus.....	299
Sulphate of Potassa.....	45	Sÿrū'pus Acā'ciæ.....	300
Sulphate of Quinia.....	274	Sÿrū'pus Acīdi Cī'trici.....	300
Sulphate of Soda.....	50	Sÿrū'pus Al'li.....	301
Sulphate of Strychnia.....	297	Sÿrū'pus Amyġ'dālæ.....	301
Sulphate of Zinc.....	55	Sÿrū'pus Auran'tii Cort'icis.....	302
Sulphite of Soda.....	51	Sÿrū'pus Auran'tii Flō'rum.....	303
SULPHUR.....	298	Sÿrū'pus Ferri Iō'didi.....	303
Sul'phur.....	53	Sÿrū'pus Fus'cus.....	53
Sul'phur Lō'tum.....	53	Sÿrū'pus Ipecacūan'hæ.....	304
Sul'phur Præcipitā'tum.....	298	Sÿrū'pus Krāmō'riæ.....	305
Sul'phur Sublimā'tum.....	53	Sÿrū'pus Lactūcar'ii.....	306
Sulphurated Antimony.....	96	Sÿrū'pus Limō'nis.....	306
Sulphuret of Antimony.....	17	Sÿrū'pus Prū'ni Virgīniæ'næ.....	307
Sulphuret of Iron.....	29	Sÿrū'pus Rhē'i.....	307
Sulphuret of Potassium.....	271	Sÿrū'pus Rhē'i Arōmat'icus.....	307
Sulphuric Acid.....	12	Sÿrū'pus Rosæ Gal'licæ.....	308
Sul'phūris Iō'didum.....	298	Sÿrū'pus Ru'bi.....	309
Sulphurous Acid.....	79	Sÿrū'pus Sarsāpāril'æ Compos'it- tus.....	310
Sumach.....	61	Sÿrū'pus Scil'læ.....	311
Swamp Dogwood.....	57	Sÿrū'pus Scil'læ Compos'itus.....	311
Sweet Almond.....	16	Sÿrū'pus Sen'ēgæ.....	312
Sweet Orange Peel.....	18	Sÿrū'pus Tōlūtā'nus.....	313
Sweet Spirit of Nitre.....	287	Sÿrū'pus Zingib'ēris.....	313

	PAGE	PAGE
T		
Tābā'cum	53	Tinctū'ra Al'ōēs et Myr'rhæ 315
Table of Changes in the Latin		Tinctū'ra Ar'nīcæ 316
Official Names.....	372	Tinctū'ra Assāfœtidæ 317
Table of Changes in the Meaning		Tinctū'ra Bellādon'næ 317
of Names.....	376	Tinctū'ra Benzō'ini Compos'ita... 317
Table of Changes in the Position		Tinctū'ra Cālūm'bæ..... 318
of Medicines	374	<i>Tinctū'ra Cam'phōræ</i> 291
Table of Medicines dismissed from		Tinctū'ra Can'nābis..... 318
the Materia Medica	367	Tinctū'ra Canthar'idis 319
Table of Medicines dismissed from		Tinctū'ra Cap'sici..... 319
the Preparations	371	Tinctū'ra Cardāmō'mi..... 319
Table of Medicines introduced		Tinctū'ra Cardāmō'mi Compos'ita 320
into the Materia Medica.....	365	Tinctū'ra Castō'rēi..... 320
Table of Medicines introduced		Tinctū'ra Cat'ēghu 321
into the Preparations.....	368	Tinctū'ra Cinchō'næ..... 321
TABLES	365	Tinctū'ra Cinchō'næ Compos'ita. 321
Tamarind	53	Tinctū'ra Cinnāmō'mi..... 322
Tamārind'us	53	Tinctū'ra Col'chici
Tanācē'tum.....	62	<i>Tinctū'ra Col'chici Sem'inis</i> 323
Tannic Acid.....	80	<i>Tinctū'ra Cōlom'bæ</i> 318
Tansy	62	Tinctū'ra Con'i'i..... 323
Tāpiō'ca.....	53	Tinctū'ra Cubē'bæ 324
Tar.....	42	Tinctū'ra Digītā'lis..... 324
Tar Ointment.....	350	Tinctū'ra Ferri Chlō'ridi..... 324
Tar Water	209	Tinctū'ra Gal'læ 326
Tarax'acum	53	Tinctū'ra Gentiā'næ Compos'ita.. 326
Tartar Emetic.....	92	Tinctū'ra Guai'āci..... 327
Tartaric Acid.....	12	Tinctū'ra Guai'āci Ammōniā'ta... 327
Tartrate of Antimony and Po-		Tinctū'ra Helleb'ōri..... 327
tassa	92	Tinctū'ra Hū'mūli..... 328
Tartrate of Iron and Ammonia...	183	Tinctū'ra Hyosey'āmi..... 328
Tartrate of Iron and Potassa....	184	Tinctū'ra Iōdin'ii 329
Tartrate of Potassa	266	Tinctū'ra Iōdin'ii Compos'ita.... 329
Tartrate of Potassa and Soda....	265	Tinctū'ra Jalā'pæ 329
TEMPERATURE.....	2	Tinctū'ra Kī'no..... 330
Tērēbinth'īna.....	53	Tinctū'ra Krāmē'riæ..... 330
Tērēbinth'īna Canāden'sis.....	54	Tinctū'ra Lobē'liæ..... 331
Tes'ta	54	Tinctū'ra Lupūli'næ..... 331
Tes'ta Præpārā'ta.....	118	Tinctū'ra Myr'rhæ 331
Thoroughwort	28	Tinctū'ra Nū'cis Vom'icæ 332
Tinctū'ra Acōnī'ti Fo'lii.....	314	<i>Tinctū'ra Olei Men'thæ Pī'pēri'tæ</i> 294
<i>Tinctū'ra Acōnī'ti Fo'liō'rum</i>	314	<i>Tinctū'ra Olei Men'thæ Vir'idis</i> .. 294
Tinctū'ra Acōnī'ti Radī'cis.....	315	Tinctū'ra Opīi..... 332
Tinctū'ra Al'ōēs.....	315	Tinctū'ra Opīi Acētā'ta..... 333
		Tinctū'ra Opīi Cam'phōrā'ta..... 333
		Tinctū'ra Opīi Deodōrā'ta 333

	PAGE		PAGE
Tinctū'ra Quas'siæ.....	334	Tincture of Lobelia	331
Tinctū'ra Rhē'i.....	335	Tincture of Lupulin.....	331
Tinctū'ra Rhē'i et Sen'næ.....	335	Tincture of Myrrh.....	331
Tinctū'ra Sanguinā'riæ.....	336	Tincture of Nutgall.....	326
Tinctū'ra Sapō'nis Camphōrā'ta.....	215	Tincture of Nux Vomica.....	332
Tinctū'ra Scil'læ.....	336	Tincture of Opium.....	332
Tinctū'ra Serpentā'riæ.....	337	Tincture of Quassia	334
Tinctū'ra Stramō'nii	337	Tincture of Rhatany.....	330
Tinctū'ra Tōlutā'na.....	338	Tincture of Rhubarb.....	335
Tinctū'ra Valēriā'næ.....	338	Tincture of Rhubarb and Senna..	335
Tinctū'ra Valēriā'næ Ammō- niā'ta.....	338	Tincture of Serpentaria.....	337
Tinctū'ra Verā'tri Vir'idis.....	339	Tincture of Squill.....	336
Tinctū'ra Zingib'ēris.....	339	Tincture of Stramonium.....	337
TINCTURÆ	314	Tincture of Tolu.....	338
Tincture of Aconite Leaf.....	314	Tincture of Valerian.....	338
Tincture of Aconite Root.....	315	Tobacco	53
Tincture of Aloes	315	Tormentil	63
Tincture of Aloes and Myrrh.....	315	Tormentil'la.....	63
Tincture of American Hellebore..	339	Toxicōden'dron.....	63
Tincture of Arnica.....	316	Tragacanth.....	54
Tincture of Assafetida.....	317	Tragācan'tha.....	54
Tincture of Belladonna.....	317	Trios'teum.....	63
Tincture of Black Hellebore.....	327	Troches of Bicarbonate of Soda...	343
Tincture of Bloodroot	336	Troches of Chalk.....	339
Tincture of Cantharides	319	Troches of Cubeb.....	340
Tincture of Capsicum.....	319	Troches of Ginger	344
Tincture of Cardamom	319	Troches of Ipecacuanha	342
Tincture of Castor	320	Troches of Liquorice and Opium	341
Tincture of Catechu.....	321	Troches of Magnesia.....	342
Tincture of Chloride of Iron.....	324	Troches of Peppermint	343
Tincture of Cinchona.....	321	Troches of Subcarbonate of Iron.....	341
Tincture of Cinnamon	322	TROCHISCI	339
Tincture of Colehicium.....	323	Trōchis'ei Crē'tæ	339
Tincture of Columbo.....	318	Trōchis'ei Cūbē'bæ	310
Tincture of Cubeb	324	Trōchis'ei Ferri Subcarbōnā'tis..	341
Tincture of Digitalis.....	324	Trōchis'ei Glyc'yrrhizæ et Opii..	341
Tincture of Ginger	339	Trōchis'ei Ipecacūan'hæ.....	342
Tincture of Guaiac.....	327	Trōchis'ei Magnē'siæ.....	342
Tincture of Hemlock.....	323	Trōchis'ei Menthæ Pi'pēri'tæ....	343
Tincture of Hemp.....	318	Trōchis'ei Sō'dæ Bicarbōnā'tis..	343
Tincture of Henbane.....	328	Trōchis'ei Zingib'ēris.....	344
Tincture of Hops	328	Tulip-tree Bark	60
Tincture of Iodine.....	329	Turmeric	57
Tincture of Jalap.....	329	Turpentine.....	53
Tincture of Kino.....	330	Turpeth Mineral	200

	PAGE		PAGE
U		VERATRIA	
<i>Ulmus</i>	54	Verā'tria.....	353
<i>Ulmus Ful'va</i>	54	Verā'trum Album.....	54
UNGUENTA.....	344	Verā'trum Vir'ide.....	55
Unguen'tum Acīdi Tan'nici.....	344	Verdigris.....	27
Unguen'tum Ad'īpis	345	VINA.....	355
Unguen'tum Antīmō'nii.....	345	Vinegar.....	9
Unguen'tum Aq'uæ Rō'sæ.....	346	Vinegar of Bloodroot	68
Unguen'tum Bellādon'næ.....	346	Vinegar of Colchicum.....	65
Unguen'tum Benzō'ini.....	346	Vinegar of Lobelia.....	66
Unguen'tum Creāsō'ti.....	347	Vinegar of Opium.....	67
Unguen'tum Gal'læ.....	347	Vinegar of Squill.....	68
Unguen'tum Hydrarg'ŷri.....	347	<i>Vī'num Al'bum</i>	55
Unguen'tum Hydrarg'ŷri Ammō- niā'ti	348	Vī'num Al'ōēs	355
Unguen'tum Hydrarg'ŷri Nitrā'- tis	348	Vī'num Antīmō'nii.....	355
Unguen'tum Hydrarg'ŷri Ox'īdi Ru'bri.....	349	Vī'num Col'chici Radī'cis.....	356
Unguen'tum Iōdin'ii.....	349	Vī'num Col'chici Sem'inis.....	356
Unguen'tum Iōdin'ii Compos'ī- tum	349	Vī'num Ergō'tæ.....	356
Unguen'tum Picis Līq'uīdæ	350	Vī'num Ipecacūan'hæ.....	357
Unguen'tum Plum'bi Carbōnā'tis	350	Vī'num Opil.....	357
Unguen'tum Pōtas'sii Iō'dīdi.....	350	Vī'num Porten'se.....	55
<i>Unguen'tum Sim'plex</i>	345	Vī'num Rhē'i.....	358
Unguen'tum Stramō'nii	351	<i>Vī'num Ru'brum</i>	55
Unguen'tum Sul'phūris.....	351	Vī'num Tābā'ci.....	358
Unguen'tum Sul'phūris Iō'dīdi..	351	Vī'num Xer'icum.....	55
Unguen'tum Tābā'ci.....	352	Viōla	63
Unguen'tum Verā'triæ.....	352	Violet.....	63
Unguen'tum Zin'ci Ox'īdi	352	Virginia Snakeroot.....	49
Uva Passa.....	54	W	
Uva Ursi.....	54	Wahoo	58
V		Washed Sulphur.....	53
Valerian.....	54	Water	17
Valēriā'na	54	Water Avens.....	59
Valerianate of Ammonia.....	91	Water of Ammonia.....	97
Valerianate of Quinia	277	Weights.....	1
Valerianate of Soda.....	285	WEIGHTS AND MEASURES.....	1
Valerianate of Zinc	362	Whisky	51
Valerianic Acid.....	81	White Hellebore.....	54
Vanil'la	54	White Lead.....	43
		White Mustard.....	50
		White Precipitate.....	201
		White Wax.....	23
		White-oak Bark.....	46
		Wild-cherry Bark.....	46





